OPPORTUNITY NYC | WORK REWARDS

LEARNING FROM THE WORK REWARDS DEMONSTRATION

Final Results from the Family Self-Sufficiency Study in New York City

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mdrc
BUILDING KNOWLEDGE TO IMPROVE SOCIAL POLICY

September 2017

Opportunity NYC–Work Rewards

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Final Findings from the Family Self-Sufficiency Study in New York City

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Overview

This report summarizes the final findings from the Opportunity NYC–Work Rewards demonstration. Launched in 2007 by the Mayor's Office for Economic Opportunity (formerly the New York City Center for Economic Opportunity), this randomized controlled trial tested three strategies for increasing employment and earnings of families receiving Housing Choice Vouchers, which are public subsidies for private market rentals. The report looks at two of those strategies: the Family Self-Sufficiency program ("FSS-only") — the main federal effort for increasing employment and earnings and reducing reliance on government subsidies among housing-assisted families — and an enhanced version of FSS ("FSS+incentives"). FSS offers case management to connect participants to job and training services and helps them build their assets: As housing-assisted families' earned income increases, so does their share of the rent; under FSS, an amount based on the increased rent portion can be saved in an interest-bearing escrow account maintained by the housing agency and paid to participants when they graduate from the program. Graduation requires that the household head is working and that the family is not receiving welfare in the 12 months leading up to graduation. In FSS+incentives, special cash work incentives were offered to encourage sustained full-time employment. This report presents results for the six years following study enrollment:

- Close to half of FSS enrollees graduated during the six years of follow-up, and about a third graduated with an escrow payment. Those assigned to FSS+incentives earned more escrow than those assigned to FSS-only. Among graduates, the FSS-only group received an average of about $3,800 in escrow payments and the FSS+incentives group received about $4,900.
- Both programs increased educational enrollment but not degree or certificate attainment, increased participants' savings and connection to banks, and reduced the use of check cashers.
- Neither program produced statistically significant improvements in labor market outcomes overall or for participants who were already working when they enrolled in the program.
- FSS+incentives increased employment and earnings for participants who had not been working at baseline. Although the control group began to catch up late in the follow-up period, cumulative earnings effects remained large and statistically significant for the nonworking subgroup.
- Both programs reduced receipt of Temporary Assistance for Needy Families in Year 5, which appears to be associated with FSS graduation requirements, but they did not significantly reduce housing voucher receipt or housing subsidy amounts.
- Benefit-cost findings suggest that over a 10-year period, both FSS interventions produced a net economic gain for households headed by individuals not working at baseline. This estimate is larger and more certain for FSS+incentives than for FSS-only. But the higher cost of FSS+incentives (due substantially to the special work incentives and higher escrow payments) means that, although it is advantageous for initially nonworking participants, taxpayers are less likely to see a positive economic return from that intervention than from FSS-only.

MDRC is leading a national evaluation of the FSS program, commissioned by the U.S. Department of Housing and Urban Development, which will place these findings in a national context.

Contents

List of Exhibits

Table

Figure

Box

Preface

How do recipients of government rental assistance respond to programs designed to help them become self-sufficient? In 2007, under former Mayor Michael R. Bloomberg, New York City officials sponsored the Work Rewards demonstration to test the effectiveness of three such programs. One of them was the Family Self-Sufficiency (FSS) program, administered by the U.S. Department of Housing and Urban Development (HUD). A voluntary program operated by public housing agencies across the country, FSS offers case management, job-related services, and an asset-building component (via an escrow account that is set up for participants) to help recipients of housing assistance build long-term savings. The demonstration also included a test of FSS plus special cash work incentives and a test of the special incentives alone. The incentives were offered as a way to test whether attaching more immediate cash rewards to work-related activities (compared with the more distant reward of escrow savings) produces positive labor market and other effects.

The final results of a randomized trial — the first for an FSS program — paint a mixed picture. Drawing on six years of follow-up data and a comprehensive study design, the results of the two FSS interventions, the focus of this report, show that FSS combined with the special work incentives produced positive and steady effects on the employment and earnings for those who were not working at enrollment, but it left most of the outcomes for the full sample relatively unchanged. The gains experienced by the nonworking subgroup did not, however, translate into reduced poverty or reduced reliance on public benefits, suggesting, perhaps, that more must be done to help this population advance once they find jobs.

In 2012, MDRC began a national evaluation of FSS, commissioned by HUD. The evaluation is testing local programs operated by 18 housing agencies across the country to provide evidence on the effectiveness of FSS beyond New York City. The findings from Work Rewards have been invaluable in informing the design of the national evaluation and in setting up a critical question for the national study to answer: How much variation exists in the national FSS program? That is, is New York City an outlier or is it emblematic of other FSS programs? Ultimately, the lessons and insights from Work Rewards and the national FSS study — together with lessons from several other MDRC projects involving moves to low-poverty communities and a behaviorally informed, intensive coaching model — will serve as the foundation for building stronger self-sufficiency programs for housing-assisted families.

Gordon L. Berlin
President, MDRC

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Our partners at the New York City Department of Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) played crucial roles in the design and implementation of Work Rewards. We thank HPD leadership for providing insightful feedback over the course of the demonstration. Thanks go to Nicole Levin, formerly at HPD, for her contributions to the Family Self-Sufficiency study design and for her thoughtful reflections on the findings.

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The continuing support of the Mayor's Fund to Advance New York City and the funders of the demonstration has been crucial. Those funders include Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, The Open Society Foundations, the Robin Hood Foundation, American International Group, the Tiger Foundation, The Annie E. Casey Foundation, the John D. and Catherine T. MacArthur Foundation, and New York Community Trust.

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coordinated the production of the report and helped with the exhibits. Kali Aloisi, Crystal Ganges-Reid, Liza Paudel, Makenzi Sumners, and Annie Utterback assisted with fact-checking. Rebecca Bender edited the report, Carolyn Thomas helped with proofreading, and Ann Kottner prepared it for publication. We also acknowledge with gratitude the work of many other MDRC staff and partners who contributed to two previously published Work Rewards reports — the foundation on which this report is based.

The Authors

Executive Summary

In 2007, under the administration of former Mayor Michael R. Bloomberg, New York City launched a set of interventions to test new and more effective ways of improving employment, earnings, and quality-of-life outcomes for households receiving rental assistance under the federal Housing Choice Voucher (HCV) program. Collectively known as Opportunity NYC–Work Rewards, three interventions were tested as part of the demonstration project, which ended, as planned, in 2014. This final report summarizes and features the results of two of the interventions in the demonstration.[1]

Nationwide, over two million households receive housing vouchers, which enable recipients to live in privately owned rental properties. The U.S. Department of Housing and Urban Development (HUD) administers the HCV program through agreements with local public housing agencies. Tenants generally pay 30 percent of their income in rent (after certain income exclusions), with the government making up the difference. Many experts contend that the structure of a subsidized rental policy may discourage some tenants from working as much as they could. An increase in a household's income triggers an increase in the tenant's rent expenses, with this extra rental charge acting as an implicit "tax" on earnings — and potentially depressing work.

Policymakers have long sought to improve voucher holders' labor market outcomes and address their barriers to work with strategies that include measures to counter the potential work disincentives in subsidized rent rules. Toward that end, HUD has funded the Family Self-Sufficiency (FSS) program since the early 1990s, providing housing agencies with modest resources to hire case managers who work with participants to develop individual self-sufficiency plans and to connect them with services in their communities. The program also includes a special component that provides an incentive to work and that helps families build their savings through interest-bearing escrow accounts, which the housing agency maintains. FSS participants still pay higher rent to the landlord when their earnings rise, but the housing agency credits the family's escrow account with an amount that is based on the increases in the

[1]The report focuses on the two interventions that include the Family Self-Sufficiency (FSS) program. As discussed below, one of these two interventions combined FSS with special work-focused financial incentives. The third intervention offered voucher holders the same financial incentives, but without FSS. Longer-term data show that the incentives-only approach did not increase employment, earnings, or total household income. For detailed information on that intervention and earlier results, see Nandita Verma, Betsy Tessler, Cynthia Miller, James A. Riccio, Zawadi Rucks, and Edith Yang, *Working Toward Self-Sufficiency: Early Findings from a Program for Housing Voucher Recipients in New York City* (New York: MDRC, 2012), and Stephen Nuñez, Nandita Verma, and Edith Yang, *Building Self-Sufficiency for Housing Voucher Recipients: Interim Findings from the Work Rewards Demonstration in New York City* (New York: MDRC, 2015).

tenant's share of rent caused by the increases in earned income during the term of the participant's FSS contract. The escrow accruals are paid to participants once they "graduate" from the FSS program — that is, when they reach the goals in their self-sufficiency plans (developed at the start of the program), usually within five years, and are not receiving any cash welfare payments through Temporary Assistance for Needy Families (TANF) or other state-run programs, such as the Safety Net Assistance (SNA) program in New York. Thus, escrow functions as a kind of forced, long-term savings investment and may also provide a financial incentive for tenants to increase their work effort.

As the first random assignment study of a local FSS program, Work Rewards charts new territory: It provides the first rigorous evidence of the effects of FSS, as operated in New York City during the period of this demonstration.[2] Albeit a single-city test, Work Rewards provides unusually rich information on the program's implementation and effects. To date, no study of FSS has provided such complete evidence for understanding the effectiveness of a largely untested federal program. This evidence also serves as a foundation for issues that will be examined as part of a national FSS evaluation, which HUD commissioned in 2012 and which MDRC is leading (discussed below).

What Work Rewards Tested

The New York City Department of Housing Preservation and Development (HPD), which operates one of the largest FSS programs in the country, agreed to subject its program, which it was beginning to modify in 2007, to a test as part of the Work Rewards demonstration. It also agreed to test a second intervention that included new work-related incentives combined with its traditional FSS program. The special incentives included cash "reward payments" that were designed to encourage voucher holders to work full time and complete approved work-related education and training activities. In a related, third experiment, which is not the focus of this final report, the New York City Housing Authority (NYCHA) — the city's primary housing agency, which operates a more broadly available housing voucher program — agreed to test the same financial incentives for its voucher holders, but without an FSS program. Both the FSS and incentives-only experiments targeted voucher holders with household incomes at or below 130 percent of the federal poverty level, a segment of the voucher population that is poorer than others served by these housing agencies.

Work Rewards thus included tests of three distinct strategies: (1) FSS alone, (2) FSS *plus* special work incentives, and (3) the special work incentives alone. The first two of these

[2]Since the demonstration ended in 2014, the housing agency has updated its FSS Action Plan — a program plan required by HUD — and has set minimum contact requirements for participants and revised other program features to support greater participant engagement.

tests ("FSS-only" and "FSS+incentives" in this report) are both part of the "FSS study," and they involve households with vouchers obtained through HPD. The third test (without FSS), or the "incentives-only" study, involved households with vouchers obtained through NYCHA. Using two parallel, randomized controlled trials (RCTs), the evaluation determined the effects of the FSS program and the new special work incentives on voucher holders' employment outcomes, housing subsidy receipt, receipt of other public assistance benefits, and various quality-of-life outcomes.[3] As noted above, this report focuses on the FSS study.

The Mayor's Office for Economic Opportunity (NYC Opportunity), a unit within the Office of the Mayor,[4] sponsored the demonstration. Seedco, a nonprofit workforce and economic development organization, provided technical assistance and operated the payment system for the special financial incentives component of the interventions. A small network of community-based organizations (CBOs) was responsible, along with HPD and NYCHA, for directly engaging families in each intervention. MDRC collaborated with all the partners on the design and implementation of the interventions and conducted the evaluation. A consortium of private funders paid for the special financial incentives and covered the evaluation costs, while NYC Opportunity and HUD supported HPD's FSS program with public dollars.[5]

Through intensive recruitment, which began in January 2008 and ended in January 2009, the CBOs enrolled 1,603 nonelderly and nondisabled voucher holders into the study within approximately one year. The majority of households (66 percent) were headed by a single adult, and most are black or Hispanic. However, their other background characteristics vary, including work experience, education levels, and how long they had held their vouchers. Qualitative data suggest that many of the special work incentives were particularly attractive to the individuals who volunteered for the FSS study.

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[3]RCTs employ an experimental design that compares the outcomes of a program group, whose members are eligible to participate in the intervention, with those of a control group, whose members are not eligible to participate in the intervention; the RCT's random assignment of study participants to either a program group or a control group is designed to ensure that the populations in the program and control groups are similar at the start of the study. (RCTs can also compare two different program groups with each other, as in this study, which randomly assigned study participants to one of three groups — that is, two program groups and a control group.) Differences between the program and control groups' outcomes reflect the program's "impacts." Statistically significant differences indicate that the impacts can be attributed with a high degree of confidence to the intervention rather than to chance. All impacts discussed here are statistically significant unless otherwise noted.

[4]NYC Opportunity was formerly the New York City Center for Economic Opportunity.

[5]The private funders include Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, Open Society Foundations, Robin Hood Foundation, American International Group (AIG), Tiger Foundation, The Annie E. Casey Foundation, The John D. and Catherine T. MacArthur Foundation, and New York Community Trust.

This final report recaps the design of the Work Rewards FSS study, describes its distinct interventions, and presents the study's key findings. As the first comprehensive impact evaluation of an FSS program, it looks at a full six years of follow-up data and examines whether each intervention had effects on moving participants to work, increasing their earnings, and reducing their use of housing and other government benefits.[6] It also reports on FSS graduation rates, escrow disbursements, and the benefit-cost ratio of the FSS interventions.

Final Results from the FSS Study

Participation, Graduation, and Escrow Receipt

FSS-Only

FSS participants can take up to five years to work toward their self-sufficiency goals. In some cases, staff may grant participants a two-year contract extension if it seems likely that they will graduate. The FSS program studied as part of Work Rewards did not set any minimum requirements for participants to contact program staff. The program was very participant-driven, with case managers responding to participants on an as-needed basis. Although HPD instituted Year 4 check-ins for all FSS participants, to ensure they were on track for reaching their FSS goals, data suggest that most participants had disengaged from the program by then.

Although FSS participation rates were extremely low, sample members who stayed connected to the program over the long term (that is, they received FSS services in Years 3 to 5) were more likely to have been employed at the time of random assignment than were those who did not remain connected with case managers during the later years. However, over the longer term, participation rates for both those who were and were not working at baseline were low.

- **Close to half of the FSS-only group graduated — completed all their FSS goals — by the end of the six-year follow-up period and received an average of about $3,754 in escrow.**

The long-term escrow account is intended to motivate families to increase earnings and to build savings. Nearly 57 percent of the FSS-only group had accrued some escrow but not everyone with an escrow balance graduated from the program and earned an escrow disbursement check. About 43 percent of the FSS-only group met the terms of their FSS Contract of Participation and graduated from the program — that is, at the time of FSS graduation, they were employed and all the members of their households were off TANF/SNA — although

[6]Before the Work Rewards study began, little evidence was available about FSS's effects in helping families move toward self-sufficiency.

some participants graduated but did not receive an escrow disbursement.[7] The FSS-only graduates collected $3,754 in escrow disbursements, on average, and about 9 percent of this group had accrued more than $10,000 in escrow. About a fifth of the FSS-only participants received a contract extension, and most of these households were still enrolled in FSS and eligible to accrue escrow at the end of the six-year follow-up period.

Those working at study entry were more likely to meet the graduation requirements than those who were not working. About 31 percent of the FSS-only households in the subgroup that was not working at the time of random assignment graduated from FSS, while 55 percent from the working subgroup graduated. The working subgroup also collected more escrow savings, on average, than the nonworking subgroup.

Those in the FSS-only group who were working at random assignment received an average disbursement of more than $2,000, while those who were not working at random assignment received an average disbursement of $1,000.

FSS+Incentives

The offer of the additional incentives attracted potential participants to volunteer for the intervention, and compared with FSS-only, FSS+incentives participants were more likely to stay connected to the program at first.

- **About 47 percent of the FSS+incentives group graduated by the end of the six-year follow-up period. FSS+incentives graduates received an average of $4,883 in escrow.**

The FSS+incentives group received almost $700 more in escrow disbursements, on average, than the FSS-only group, a statistically significant increase. Similarly, graduates in the FSS+incentives group were twice as likely as those in the FSS-only group to have escrow disbursements of more than $10,000 over five years (20 percent of the FSS+incentives graduates compared with 9 percent of the FSS-only graduates). As with the FSS-only participants, about a fifth of the participants in the FSS+incentives group received a contract extension.

[7]The graduation rate for the FSS-only sample is comparable to the rate from HUD's FSS tracking study, the only other study to have tracked the FSS graduation rates for a group of enrollees. In that study, about one-fourth of those FSS participants graduated from the program within four years, with another roughly 20 percent assessed as being "on track" to graduate within five years. See Lalith de Silva, Imesh Wijewardena, Michelle Wood, and Bulbul Kaul, *Evaluation of the Family Self-Sufficiency Program: Prospective Study* (Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 2011).

Nearly all of the escrow disbursement effect of the additional cash incentives was generated by the nonworking subgroup. In addition, among the nonworking subgroup participants, the cash incentives boosted graduation rates from 31 percent to 42 percent.

In addition to escrow, FSS+incentives offered two special work incentives for two years (through mid-2010). Unlike escrow, which has a deferred payout, the special work incentive payments were distributed every two months, starting in September 2008. Individuals who earned a cash reward collected an average of $2,063 in incentive payments over the two-year period. Since most of the rewards earned were for full-time work, it is not surprising that those who were employed full time at study entry were most likely to earn rewards from the program; 67 percent of those working full time at study entry had earned at least one reward. Those who were employed part time at random assignment were a little less likely to earn any rewards (41 percent), and those who were not working were least likely to earn rewards (24 percent).

Effects on Employment, Earnings, and Government Benefits

FSS-Only

- **Over six years, FSS-only did not increase employment or earnings for the core sample.**[8]

Although employment levels were high for study participants (74 percent of the control group worked at some point during the follow-up period), many struggled to work steadily. In fact, only about 43 percent of control group members worked during an average follow-up quarter. Over the six-year period, the rates for those outcomes are only somewhat higher for the program group, and the differences are not statistically significant. Average earnings also differed little across the FSS-only program and control groups.

- **Neither did FSS-only reduce receipt of housing assistance.**

While leaving the voucher program is not an FSS requirement, the program's employment and self-sufficiency focus could help families leave the voucher program or reduce their housing subsidy, which could also free up vouchers and resources for other families and enable housing agencies to serve a larger population. Housing data show that about 84 percent of the FSS-only participants continued to receive housing assistance six years after they

[8]The "core sample" (versus the "full sample") excludes the elderly and disabled population, as well as 14 sample members (0.7 percent) who appeared to be part of the Hasidic community, an Orthodox Jewish community that is larger in New York City than elsewhere in the United States. The community's unique culture was expected to result in important differences in their employment goals and experiences compared with most other housing voucher recipients. Results for the full sample, and on the Hasidic sample, are presented in earlier MDRC Work Rewards reports, covering four years of follow-up.

enrolled in the evaluation. Over the follow-up period, there is little evidence that FSS-only reduced housing assistance receipt or subsidy value. However, as noted above, the intervention did not produce earnings gains for the program groups as a whole, so this finding is not unexpected.

- **FSS-only decreased household TANF receipt in Year 5, the final year of the program for most participants.**

One requirement to successfully complete FSS is that participants and their household members on the voucher must be free of cash assistance (TANF/SNA) for a full 12 months before program graduation. The interim report noted impacts on TANF receipt near the start of Year 5, the final year of FSS for most participants.[9] Household-level employment and earnings measures also show a pattern of improving over time for the nonworking subgroup, although larger impacts are evident in the earlier years of follow-up. Longer-term follow-up data confirm that TANF receipt was indeed lower for the FSS-only group in Year 5: 21 percent of the FSS-only group received TANF/SNA in Year 5 compared with the control group value of 26.1 percent. These impacts fade in Year 6, the post-program period for most participants. Taken together, these findings suggest that the apparent impact on TANF receipt may be associated with FSS graduation requirements. In addition, the early gains in household earnings among the nonworking subgroup may have contributed to the longer-term reduction in TANF for the core sample. The associated drop in the TANF amount is not statistically significant, though this may be because the people who left the TANF program were receiving fewer benefits than was the average recipient.

- **FSS-only did not reduce poverty or the incidence of material hardship (before receipt of escrow payments). It did, however, connect families to mainstream banking institutions and improve their financial behavior.**

Poverty and well-being were examined roughly 42 months after study entry, capturing dimensions of economic and material well-being while participants were still enrolled in FSS (that is, before FSS escrow payments were made to program graduates). Given that the interventions produced no early effects on income and income sources, such as earnings, it is not surprising that no notable effects on poverty and well-being were observed. It is possible that a later survey, conducted after families had received their escrow payments, may have picked up some improvements in material well-being.

[9]Nuñez, Verma, and Yang (2015).

FSS encourages and helps clients to improve their credit, connect to mainstream banking, learn how to manage their finances, and build savings. At four years, 52 percent of the FSS-only group had a bank account compared with 43 percent of the control group. With more FSS participants connected to mainstream banking, 29 percent of program group respondents, compared with 38 percent of control group respondents, reported using check-cashing establishments at least once a month (which charge high fees to cash checks and are often used by low-income households without access to mainstream banking).

FSS+Incentives

The longer-term data show generally similar patterns of effects for the FSS-only and FSS+incentives interventions. Neither intervention improved employment rates or average earnings for the core sample over six years of follow-up.

- **While FSS+incentives did not have an overall effect on employment or earnings, it did produce large and sustained gains in employment and earnings through Year 5 for the subgroup of individuals that was *not employed* at study entry. These effects weaken in Year 6. The program did not improve earnings for participants who were already employed.**

Overall, although FSS+incentives did not increase employment or earnings for the full sample, it did produce large and statistically significant gains in employment and earnings for the subgroup of program participants who were *not working* at random assignment. Among this group, it increased the program group's average quarterly employment rate over the six-year follow-up period by 7.6 percentage points relative to the control group rate of 25.4 percent, as shown in Table ES.1. It also increased the nonworking subgroup's average total earnings by $8,500 — a gain of 38.4 percent over the control group average. By Year 6, however, the positive effects on earnings and employment for this subgroup weaken and are no longer statistically significant, as control group members begin to "catch up" to program participants.

In contrast, the FSS+incentives strategy had no positive effects on employment or earnings for individuals who were *already working* when they entered the program. This subgroup's average quarterly employment rate and average earnings during the follow-up period were much higher than those outcomes for the nonworking subgroup, and the program did little to improve them further — whether through promotion, movement to better employment, or increasing employment stability. Early field observations and interviews with program participants indicated that already-employed individuals juggled multiple priorities, making it difficult to incorporate FSS into their lives along with work and family responsibilities. In addition, many viewed the services that FSS offered as largely focused on work readiness and job search, and not likely to help them with employment advancement. Other studies that have carefully

Table ES.1

Six-Year Impacts on Employment and Earnings, FSS Study, Core Sample

Outcome	FSS-Only Program Group	FSS-Only Control Group	FSS-Only Difference (Impact)	FSS-Only Sig.	FSS-Only Change (%)	FSS+Incentives Program Group	FSS+Incentives Control Group	FSS+Incentives Difference (Impact)	FSS+Incentives Sig.	FSS+Incentives Change (%)
Core sample										
Ever employed (%)	75.6	74.1	1.5	NA	2.1	75.6	74.1	1.5	NA	2.0
Average quarterly employment (%)	45.2	42.8	2.4	NA	5.5	45.6	42.8	2.8	NA	6.4
Average earnings ($)	48,251	46,514	1,736	NA	3.7	48,465	46,514	1,951	NA	4.2
Sample size (total = 1,603)	546	534				523	534			
Not working at random assignment										
Ever employed (%)	65.4	61.8	3.6		5.8	68.6	61.8	6.8 *	††	11.0
Average quarterly employment (%)	28.6	25.4	3.2		12.4	33.0	25.4	7.6 ***	††	29.9
Average earnings ($)	25,955	22,153	3,802		17.2	30,653	22,153	8,500 **	††	38.4
Sample size (total = 814)	270	273				271	273			
Working at random assignment										
Ever employed (%)	85.7	88.2	-2.4		-2.7	84.1	88.2	-4.1	††	-4.7
Average quarterly employment (%)	61.9	61.7	0.2		0.3	60.2	61.7	-1.6	††	-2.5
Average earnings ($)	71,676	72,176	-499		-0.7	68,432	72,176	-3,744	††	-5.2
Sample size (total = 771)	271	254				246	254			

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records and Work Rewards Baseline Information Form (BIF) data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Differences across subgroup impacts were tested for statistical significance. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Sample sizes may vary across measures because of missing values.

tested much more intensive initiatives for low-income, employed populations underscore the difficulty of helping working participants advance, suggesting, more generally, that it may be worthwhile to reexamine how FSS programs approach this challenge.

The employment and earnings impacts of FSS+incentives versus the control group were typically larger and consistently statistically significant for the nonworking subgroup compared with their counterparts in the FSS-only program. Overall, the pattern of results suggests that the positive impacts on employment and earnings for the FSS+incentives nonworking subgroup are the product not just of the special incentives alone, but of the combination of FSS services and financial incentives.[10]

- **FSS+incentives did not reduce housing voucher receipt. However, it did decrease household TANF receipt in Year 5.**

Similar to FSS-only, there is little evidence that FSS+incentives reduced reliance on housing subsidies for the core sample. Despite the gains in employment and earnings for those who were not working at study entry, there is no clear associated drop in housing voucher receipt or value in the follow-up period. However, as with FSS-only, it does appear that FSS+incentives decreased TANF receipt in Year 5 for the core sample. This decrease in TANF receipt may be associated with FSS graduation requirements and, for the nonworking subgroup, the early gains in household earnings.

- **FSS+incentives did not reduce poverty or the incidence of material hardship.**

Given that FSS+incentives did not produce overall impacts on earnings reported by the unemployment insurance (UI) system or receipt of public benefits, it is not surprising to see the program's lack of effects on income, poverty, and other dimensions of material well-being. (See Table ES.2.) Analysis of impacts on poverty and material hardship by employment status at random assignment also revealed no differential impacts for this subgroup of study participants. Given the earnings gains experienced by the group that was not working at study enrollment, it is noteworthy that those gains did not translate into broader effects on well-being. However, as already noted, this finding is generally consistent with other studies showing that workforce interventions with positive earnings effects have not produced substantial reductions in material

[10]The results of the incentives-only study for NYCHA voucher holders, which did not include case management services and found no consistent effects on employment or earnings, support this finding. See Nuñez, Verma, and Yang (2015).

Table ES.2

Impacts on Selected Outcomes Measuring Benefit Receipt, Material Hardship, and Banking, FSS Study, Core Sample

Outcome	FSS-Only Program Group	FSS-Only Control Group	FSS-Only Difference (Impact)	FSS-Only Change (%)	FSS+Incentives Program Group	FSS+Incentives Control Group	FSS+Incentives Difference (Impact)	FSS+Incentives Change (%)
TANF/SNA receipt								
Received TANF/SNA, Years 1-6 (%)	55.6	59.2	-3.6	-6.0	55.0	59.2	-4.2	-7.0
Amount received, Years 1-6 ($)	7,735	8,572	-837	-9.8	7,854	8,572	-717	-8.4
Food stamp receipt								
Received food stamps, Years 1-6 (%)	89.6	92.2	-2.6	-2.8	89.7	92.2	-2.5	-2.7
Amount received, Years 1-6 ($)	18,352	18,397	-44	-0.2	17,722	18,397	-674	-3.7
Section 8 housing								
Received Section 8 housing subsidy, Year 6 (%)	83.3	84.9	-1.6	-1.9	84.4	84.9	-0.6	-0.6
Total Section 8 housing subsidy, Years 1-6 ($)[a]	61,056	60,005	1,051	1.8	58,810	60,005	-1,195	-2.0
Sample size (total = 1,455)	492	487			476	487		
Material hardship (%)								
Household did not pay full rent or mortgage in past year	41.8	42.7	-0.9	-2.1	40.5	42.7	-2.2	-5.2
Household did not pay full utility bill in past year[b]	40.3	38.4	1.9	4.9	36.9	38.4	-1.5	-3.9
Household usually did not have enough money to make ends meet at end of month	51.1	51.7	-0.6	-1.0	50.9	51.7	-0.8	-1.5
Banking and savings								
Respondent currently has any bank account (%)	51.6	42.9	8.7 **	20.3	56.0	42.9	13.1 ***	30.5
Household has any savings (%)	16.0	11.8	4.2	35.9	19.1	11.8	7.3 ***	62.1
Sample size (total = 1,152)	385	381			386	381		

(continued)

Table ES.2 (continued)

SOURCE: MDRC calculations using data from the New York City Human Resources Administration (HRA), the New York City Department of Housing Preservation and Development (HPD), and the Work Rewards 42-Month Survey. The benefit receipt data cover the period through June 30, 2015.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals. A two-tailed t-test was applied to differences between outcomes for the program and control groups. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of families or sample members.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Calculated subsidy amounts are Housing Assistance Payments (HAP) to landlords and do not include utility allowance payments.

[b]Utilities include gas, oil, and electricity.

hardship or improvements in reported well-being.[11] It may be that the earnings gains need to be larger in order to have appreciable consequences for poverty and well-being — or the measures used were a little too blunt to detect qualitative changes in material well-being.

- **Similar to FSS-only, FSS+incentives appears to have had positive effects on some aspects of participants' financial behavior.**

Four years after study entry, 56 percent of the FSS+incentives program group reported having a bank account compared with 43 percent in the control group. Those in the FSS+incentives program group were also more likely to have a checking account (51 percent versus 38 percent). While program participants needed to have bank accounts for their incentive payments, they maintained their accounts long after they stopped receiving those payments. There is also some evidence that the program reduced the use of check cashers and increased savings. Among those in the FSS+incentives program group, 19 percent reported having "any savings" versus 12 percent in the control group. The gains in savings did not, however, translate into a reduction in debt or a change in the composition of debt.

Benefit-Cost Analysis

Work Rewards offers the first benefit-cost assessment of a regular FSS program. It examines the net value (that is, the benefit minus the cost) of FSS-only and FSS+incentives as

[11]See, for example, Charles Michalopoulos, *Does Making Work Pay* Still *Pay? An Update on the Effects of Four Earnings Supplement Programs on Employment, Earnings, and Income* (New York: MDRC, 2005).

public investments from three distinct perspectives — families, government or taxpayer, and society — and asks whether the two programs are cost-beneficial through 10 years, four years beyond the follow-up period used earlier. The estimated net value of each intervention to the participating families indicates whether or not the families came out ahead financially by participating in FSS. The net value to taxpayers considers whether or not taxpayers come out ahead economically from this public investment in these interventions. The net value of FSS to society reflects, in effect, the contribution of the program to the gross national product. These net values provide bottom-line conclusions of the benefit-cost analysis: *positive net values indicate cost-effectiveness, and negative values denote ineffectiveness.*[12]

The benefit-cost analysis concludes generally that neither FSS-only nor FSS+incentives is cost-effective for households headed by individuals who were already working at baseline. This finding aligns with results from the impact analysis, which also indicates better results for individuals who were not working at study enrollment. Both programs take years to achieve cost-effectiveness for the nonworking subgroup, but they eventually reach that goal. For FSS-only, the results of the benefit-cost analysis suggest that the program achieved a positive investment return — for families, for taxpayers, and for society as a whole — within 10 years. The payoff is relatively slow, most likely because FSS success is limited to families that are not in the labor market at the start of their participation in the program and because the intervention lasts five to seven years. Similarly, the evidence is stronger that families in the nonworking subgroup who were assigned to FSS+incentives are likely to come out ahead financially within the same time period, and to a larger degree. However, taxpayers are less likely to see a return on investment in this time period because of higher program expenditures on reward payments and escrow disbursements. These benefit-cost estimates are subject to statistical uncertainty. However, it can be concluded with a high level of certainty that families in the FSS+incentives group who were not working at study entry will experience financial gains over the long term.

What Next?

The Work Rewards demonstration, part of a growing portfolio of evidence on strategies to promote self-sufficiency among housing-assisted families, offers important insights and lessons from one site. Hundreds of housing agencies around the country operate FSS, and HUD regulations allow public housing agencies significant implementation flexibility, which could translate into varying programmatic approaches and practices and potentially varying outcomes. MDRC is currently leading a national evaluation of the program, which was commissioned by HUD in 2012. The study sites span a wide range of programmatic approaches and local eco-

[12]The benefit-cost analysis, which is a more comprehensive economic assessment, is conducted at the household level and does not use the same outcomes or estimates that were used for the individual-level earnings impacts discussed earlier.

nomic and housing contexts, allowing it to investigate how the FSS framework is implemented outside of New York City and its effects on the types of outcomes observed in Work Rewards.

In addition, two interventions are experimenting with alternate strategies: the Rent Reform Demonstration, which is testing a rent policy that would be simpler to administer and creates a greater financial incentive for tenants to increase their earnings, and MyGoals for Employment Success, a new MDRC demonstration that combines personalized and structured goal-setting and coaching with a new set of financial incentives to support participants in making progress toward better labor market and other personal well-being goals.

Looking just at the findings from Work Rewards could lead to the conclusion that interventions are needed that can generate bigger and more transformative effects — interventions that can help with advancement and that can help people who have varying levels of barriers to employment to take significant steps toward self-sufficiency. The FSS program includes some attractive features, including escrow and a multi-year framework, but more might be necessary to support families in making progress toward their goals and to help them advance. The national FSS evaluation, which includes more sites, will explore the effectiveness of existing programs to determine whether the findings for New York City's experience have wider applicability.

Chapter 1

Introduction

Federal housing subsidies are an important component of the national safety net. Families receiving these subsidies are among the poorest and most disadvantaged families in America, making them the focus of self-sufficiency interventions. Although roughly half of those receiving housing assistance work, many work only part time, and such work is typically low-wage and inconsistent.[1] It is also common for housing subsidy recipients to receive benefits from other government transfer programs. Many experts contend that the structure of the housing subsidy policy itself may discourage some tenants from working as much as they could and getting off the subsidy.

To help improve the labor market outcomes of families receiving housing assistance, the U.S. Department of Housing and Urban Development (HUD) funds the Family Self-Sufficiency (FSS) program, providing public housing agencies (PHAs) with modest resources to hire case managers,[2] who work with participants to set self-sufficiency goals and to connect them with services in their communities. The program also includes an escrow component to help families build their savings through interest-bearing accounts, which the housing agency maintains. Like others receiving housing assistance, FSS participants pay an increased rent to the landlord when their earnings rise, but the housing agencies credit the family's escrow account with an amount that is based on the increases in earned income during the term of the participant's FSS contract. The escrow accruals are paid to participants once they graduate from the program — that is, when they are employed, when they meet all the goals outlined in the self-sufficiency plan they agreed to with the housing agency (usually within five years), and when the household has been off cash welfare payments through Temporary Assistance for Needy Families (TANF) or the state-run Safety Net Assistance (SNA) program for the 12 months before graduation. The escrow account functions as a kind of forced long-term savings account and may also provide a financial incentive for tenants to increase their work effort.[3]

Despite this program's operations since the early 1990s, there were no formal assessments of its effectiveness for decades. This changed in 2007, when under the administration of former mayor Michael Bloomberg, New York City officials launched three initiatives testing

[1] Sard (2013).

[2] In this report, "case managers" and "case coordinators" are used interchangeably.

[3] Tenants generally pay 30 percent of their income in total tenant payment, or TTP (after certain income exclusions), with the government making up the difference. Thus, an increase in a household's income triggers an increase in TTP, with this extra rental charge acting as an implicit "tax" on earnings.

distinct strategies for promoting employment and economic well-being among housing-assistance recipients, particularly those receiving Housing Choice Vouchers (HCVs), which provide rent subsidies (known in the past as "Section 8," after Section 8 of the Housing Act of 1937).[4] Called the Work Rewards demonstration, the collection of interventions included a direct test of the effectiveness of New York City's FSS program alone ("FSS-only" in this report); a test of FSS combined with a set of special cash work incentives, or "reward payments" ("FSS+incentives" in this report); and a separate test of the special cash incentives by themselves ("incentives only" in this report).[5] These interventions were designed to target the most economically disadvantaged voucher holders, those with household income under 130 percent of the federal poverty level.[6]

The demonstration was designed in collaboration with the Mayor's Office for Economic Opportunity, or "NYC Opportunity" (formerly New York City's Center for Economic Opportunity), the city's two housing agencies — the New York City Department of Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) — and MDRC and Seedco, both New York-based nonprofit organizations. It was one of more than 50 initiatives sponsored by NYC Opportunity to address, among other issues, a special Poverty Commission's recognition of the importance of pairing employment and savings supports with housing assistance to lift families out of poverty. Against this backdrop, the Work Rewards demonstration was launched.[7] It operated from 2008 to 2014.

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[4]Section 8 of the Housing Act of 1937 (42 U.S.C. §1437f), often called "Section 8," as repeatedly amended, authorizes the payment of rental housing assistance to private landlords. The Housing and Community Development Act of 1974 further amended the U.S. Housing Act of 1937.

[5]For the incentives-only test (not covered in this report), NYCHA agreed to test the same financial incentives for its voucher holders, but without an FSS program. Thus, both New York City PHAs were involved in testing Work Rewards' innovative strategies to promote work for voucher-assisted households. In NYCHA's incentives-only study, the incentives were intended to encourage participants to take the extra steps involved in finding available resources in the community or pursuing work goals of their own. Overall, longer-term data confirm earlier results: The incentives-only intervention did not produce a consistent pattern of statistically significant impacts on employment and earnings overall or for the employment subgroups. The program did slightly reduce food stamp receipt over six years and housing subsidy receipt in Year 6. The reduction in housing subsidy receipt was likely produced by earnings increases of adults in program group households who did not enroll in the Work Rewards study and whose earnings data were not collected. See Nuñez, Verma, and Yang (2015a, 2015b) for the four-year results; longer-term results are available from MDRC on request.

[6]In 2007, the federal poverty level for a family of three was $17,170, and 130 percent of the poverty level for such a family was $22,321 (U.S. Department of Health and Human Services, 2007).

[7]The demonstration is part of a cluster of three studies known collectively as Opportunity NYC. Each study used cash rewards to promote activities expected to build human capital — that is, the skills and capacities that improve families' chances of escaping poverty. The two other projects are Family Rewards (a comprehensive "conditional cash transfer" program) and Spark, an education-focused incentives program designed to improve school performance of fourth- and seventh-graders. MDRC evaluated Family Rewards. See Riccio and Miller (2016) for a summary of that study. Spark was evaluated by Harvard Education Labs.

As the first random assignment test of a local FSS program, Work Rewards charts new territory: It provides the first evidence of the effects of FSS, as operated in New York City for the Work Rewards demonstration. Albeit a single-city test, the demonstration provides unusually rich information on both the program's implementation and the experiences and outcomes of individuals who enrolled in FSS-only and FSS+incentives, both designed with the aim of helping families make progress toward self-sufficiency. The data sources — administrative records, surveys, and program data — allow for a detailed investigation into one of the largest FSS programs in the country and assessment of whether the models helped produce the hypothesized self-sufficiency outcomes, and if so, for whom. The Work Rewards evaluation also tracks participants' program graduation rates, markers of success for FSS programs, and examines whether participants reach this point, what their escrow balances are, and what amounts are ultimately disbursed. Another important contribution of this demonstration is that it provides the only formal benefit-cost analysis of FSS. Thus, to date, no study of an FSS program has provided such complete evidence and insights for understanding the effectiveness of a largely untested federal program. The emerging evidence from this study also set a solid foundation for the design and implementation of a national FSS evaluation, which HUD commissioned in 2012 and which MDRC is leading (discussed below).

This final report follows two other reports that have described the launch, early implementation, and impacts of the Work Rewards interventions. In December 2012, MDRC published a report on the first two and a half years of the demonstration, a period that included the program start-up and a stage when the interventions were beginning to mature. The initial findings showed that the three interventions — FSS-only, FSS+incentives, and incentives-only — had no overall consistent effects on voucher holders' labor market outcomes. That is, they produced little consistent improvement in employment and earnings for the full sample. However, FSS+incentives generated large increases in average quarterly employment rates and average earnings for voucher holders who were not working at the time they enrolled in the study. Consistent with the early findings, the interim report, which was released in June 2015 and focused on four years of follow-up, showed that the three FSS interventions produced no clear gains in employment or earnings for the study samples overall. However, FSS+incentives continued to demonstrate strong employment and earnings effects for participants who were not working at the time of random assignment. Beyond employment and earnings, there was no evidence that the interventions reduced poverty; receipt of government benefits, including housing; or the incidence of material hardships. However, the interim report showed that both FSS-only and FSS+incentives appear to have led to some improvements on various indicators of financial well-being, which was a focus of the FSS interventions.

This report, the third and final one for the demonstration, focuses on the FSS study (that is, the two Work Rewards interventions that involved FSS-only and FSS+incentives), recaps the design of the FSS interventions, and updates and summarizes key findings, covering many of

the same outcomes examined over the evaluation's follow-up period. It looks back at the full six years of follow-up and summarizes each of the two programs' effects on moving participants to work, increasing their earnings, and reducing their use of housing and other government benefits. It also reports on FSS graduation rates, escrow disbursements, and the benefit-cost assessment of the FSS interventions. Outcomes examined in the previous reports are highlighted selectively.[8]

Box 1.1 presents a brief overview of the incentives-only study and its key results.

Overall, this report shows that the six years of data yield few new patterns with respect to the employment or earnings effects of the FSS interventions: FSS-only and FSS+incentives both failed to increase employment rates or earnings for the overall sample, over and above the levels experienced by the control group. The early positive results for the FSS+incentives nonworking subgroup persisted through Year 5 but faded in Year 6, a result discussed later in this report. The new outcomes examined in the report — graduation and escrow, for example — show that HPD disbursed over $2 million to participants who successfully graduated from the program (about a third of the total enrolled). Among the FSS graduates, households in the FSS-only group collected about $3,800 in escrow savings, on average, and those in the FSS+incentives group collected about $4,900. The benefit-cost analysis shows that the return on government's investment in FSS accumulates over many years. Ten years after Work Rewards started, both FSS-only and FSS+incentives appear cost-beneficial for nonworking families from the standpoints of families and society, and confidence in these findings is relatively high. The more expensive FSS+incentives intervention appears not to reach a break-even return within that period.

Federal Housing Assistance and Employment

Housing assistance to low-income renters is provided through three primary means: HCVs; project-based assistance, under which building owners receive government subsidies to reduce rents; and public housing assistance. Over five million low-income households receive help through these programs, the largest of which is the HCV program, providing rental assistance to a little over two million low-income households.[9] Administered by over 2,200 local housing agencies, the voucher program allows families to select a housing unit of their choice in a neighborhood of their choice, as long as the housing meets federal inspection standards and the

[8]This report draws extensively on these two previous reports — Nuñez, Verma, and Yang (2015a) and Verma et al. (2012) — which are referenced throughout.

[9]Center on Budget and Policy Priorities (2016a).

Box 1.1

The Incentives-Only Study: Design and Key Findings

The Opportunity NYC–Work Rewards incentives-only study, a companion intervention to the Work Rewards FSS study, tested whether special work incentives alone (or "reward payments") could improve the labor market outcomes of New York City Housing Authority (NYCHA) voucher holders. Using the same two cash work incentives as those offered to the FSS+incentives group — one for employment and one for education and training — the incentives-only intervention did not include any case management services or an escrow account. It tested whether the offer of immediate cash rewards by itself would motivate participants to take the extra steps to pursue work-related goals on their own.

NYCHA households with incomes at or below 130 percent of the federal poverty level were recruited and enrolled between January and October 2008. They were randomly assigned to either a program group that was offered the special incentives or a control group that was not offered the incentives. Outcomes for 1,318 nonelderly and nondisabled voucher holders were tracked for six years, through program and administrative records. The sample members were similar to the broader NYCHA population and those enrolled in the FSS study. Seedco and four CBOs operated the program from mid-2008 to mid-2011. Because participants in the incentives-only group were not offered other services, their interactions with program staff were structured around orientation and guidance for program rules and service referrals, if requested.

Six years of follow-up data were collected. By the time the two-year incentives offer ended in mid-2010, nearly half of the program group (49 percent) had earned at least one reward payment, in most cases for full-time employment. Few earned rewards for completing approved education or training activities. On average, participants who qualified for any rewards earned $2,213. Those who had better labor market prospects when they entered the program were more likely to earn rewards. For example, they had more education, were less likely to have health-related barriers to work, and were much more likely to be working already.

There is no evidence that the incentives-only program produced statistically significant impacts on employment or earnings over the follow-up period. About three-fourths of the sample worked at some point during the follow-up period. Employment was not steady for either the program or control group, with just over 48 percent working in an average quarter. The program did produce small but statistically significant reductions in food stamp receipt over six years and in housing subsidy receipt in Year 6. The reduction in housing subsidy receipt was likely driven by earnings increases from adults in program households who did not enroll in the Work Rewards study and whose earnings data were not collected.

The program increased household income only in Years 1 and 2, while households were earning reward payments, but the effects faded after Year 2. This finding suggests that the early income gains were driven by the reward payments during the program period.

The study is described more fully in an earlier report on Work Rewards;* long-term results are available from the authors on request.

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*See Nuñez, Verma, and Yang (2015a, 2015b).

landlord is willing to accept the housing voucher. Families contribute 30 percent of their monthly income for the rent (a family's rent contribution and utility payments are referred to as its *total tenant payment*, or TTP) and the HCV program covers the rest, up to a locally determined maximum.

Rental vouchers became part of U.S. housing policy in the 1970s.[10] Eligibility is currently limited to U.S. citizens and some categories of noncitizens and is based on total annual gross income and family size.[11] In general, the income of newly admitted voucher households may not exceed 80 percent of the median income for the metropolitan area or county in which the family chooses to live. However, the program gives priority to extremely low-income families by reserving at least 75 percent of available vouchers each year for families with income at or below 30 percent of the area median income. The housing voucher does not have a time limit, but when families' incomes increase to the point that their subsidy is equal to $0, and stays that way for six months, they become ineligible to continue receiving their subsidy. Congress has, to date, provided funding annually for all current voucher holders, although there is no statutory guarantee of permanent renewals.

Housing vouchers are distributed on a first-come, first-served basis, and the demand for housing assistance often exceeds the resources available to HUD and the local housing agencies. As a result, long waiting periods are common for families — and some housing agencies close their waiting lists for long periods of time when there are more families on the list than can be assisted in the near future; others open their waiting lists for brief periods. At the same time, in tight housing markets, many families face difficulties finding a unit that they can lease-up within the time period allocated for locating a rental unit.[12] Thus, not all families who are offered housing vouchers are able to use them. Further, the long waiting list for the subsidy also discourages families from giving up their vouchers, which could risk their housing stability.

For families who are able to use their housing voucher, this subsidy provides them with the choice of where to live. Many policymakers hope that housing vouchers will enable families to live in somewhat better neighborhoods than they could afford without them — and there is

[10]The current voucher program has its roots in the Section 8 Existing Housing Program, enacted as part of the Housing Act of 1974 and the Freestanding Voucher program, established in 1983. The Quality Housing and Work Responsibility Act of 1998 merged these two programs, keeping several aspects of the voucher program. See Schwartz (2006) for additional background information on the HCV program.

[11]According to HUD, "family" is defined to include a person living alone or a multiple-person household whose combined income does not exceed the income limits prescribed by HUD.

[12]Olsen (2003); see Finkel and Buron (2001) for a discussion of national take-up rates. HUD's evaluation of the Welfare to Work Voucher Program also found that in the first year after random assignment, the program group members across all six sites showed a lease-up rate of 55 percent. (See Orr, Patterson, Kaul, and Mills, 2002.) "Lease-up" refers to the process of using a voucher to rent a unit in the private market.

some evidence from the evaluation of the Welfare to Work Voucher Program that this in fact happens.[13] There is also evidence that moving to better neighborhoods improves the physical and mental health of many voucher holders.[14] Recent research further shows that young children in families that used housing vouchers to move to better neighborhoods fared much better as young adults than similar children who remained in extremely poor neighborhoods.[15] So far, however, there is no evidence that the use of housing vouchers in better neighborhoods leads to more work, higher earnings, or improved economic well-being among parents.

Work Effort Among Housing-Assisted Households

The HCV program serves a little over two million households. More than half of assisted households are elderly people (over age 62) or people with disabilities. One analysis suggests that of the households that are neither elderly nor disabled, nearly three-fourths (73 percent) are working, worked recently, or are likely subject to work requirements under another program.[16] However, the employment and earnings trajectories of this population have been a long-standing policy concern. Given both the potential employment advantage that voucher receipt may offer and the potential work disincentives inherent in various government assistance programs, researchers and policymakers have questioned the expected benefits of employment-focused self-sufficiency programs. Some housing experts and analysts have argued that the provision of rental assistance to low-income families not only improves access to decent housing but may also — in and of itself — promote work.[17] This view holds that the housing stability that comes from rent subsidies may enable recipients to focus on employment or building human capital, and that when housing assistance takes the form of vouchers, families

[13]In 1999, Congress enacted the Welfare to Work Voucher Program. This demonstration program funded approximately 50,000 housing vouchers for families receiving or eligible to receive cash assistance, as well as meeting the HCV eligibility requirement. Seven public housing agencies were engaged in a random assignment evaluation of this program. See Abt Associates et al. (2006).

[14]The Moving to Opportunity (MTO) experiment shows that the MTO-induced changes translate into a number of important improvements in housing quality, neighborhood environment, safety, and mental and physical health for adults but had no detectable effects on work, earnings, or other economic outcomes for adults (Chetty, Hendren, and Katz, 2015).

[15]Chetty, Hendren, and Katz (2015). The study compared long-term outcomes for children who were younger than 13 when their families entered the MTO demonstration and used housing vouchers to relocate to low-poverty neighborhoods with outcomes for children in similar families that remained in public housing developments in extremely poor neighborhoods. Using Internal Revenue Service data, the author found that children in families that used a voucher to move to lower-poverty neighborhoods were significantly more likely to attend college and as young adults earned nearly $3,500 more a year than their counterparts in the control group, who did not receive an MTO voucher. The MTO studies reinforce the conclusions of earlier research. (See Schwartz, 2012.)

[16]Center on Budget and Policy Priorities (2016b).

[17]See Sard and Waller (2002) for one discussion on this perspective.

are able to move to better-quality neighborhoods that offer more or better employment opportunities. This view, however, is challenged by evidence that seems to suggest that housing assistance alone — though it undoubtedly benefits many families in selected ways — may not, on average, improve employment outcomes.[18]

As with any means-tested program, the provision of a subsidy has the potential to affect program participants' work efforts. In this case, voucher holders may feel less pressure to work when their housing expenses are subsidized and their remaining income is adequate to sustain the family without the cost of seeking work or finding adequate child care while working. Similarly, the HCV program's rent rules could also discourage work: Voucher holders must pay 30 percent of their income for rent, up to the point that they are no longer eligible for this subsidy.[19] Thus, their participation in the voucher program subjects them to a tax on additional earnings, which could negatively affect their inclination to work. Further, since housing assistance is not an entitlement, voucher holders may be reluctant to increase their earnings to the point of becoming ineligible for the subsidy, because there is no guarantee of being able to obtain a voucher again if they lose their job or see their earnings fall for other reasons. Accompanying the potential depressing effects of voucher receipt on work, voucher holders face deep barriers to employment, including low levels of education and skill attainment, limited access to social networks that might link them to jobs, and a wide range of health, personal, and family problems.[20]

Policymakers have increasingly focused on the importance of promoting work among housing-assisted families. It is hoped that raising employment rates and earnings among voucher holders will increase their economic well-being and overall quality of life. But helping residents progress toward economic self-sufficiency is also important in terms of making the housing subsidy serve more eligible families: Increasing work-eligible tenants' employment and earnings so they can graduate from housing assistance more quickly, or at least require smaller

[18]For example, the findings from the Welfare to Work Voucher demonstration conducted in the early 2000s found that having and using a voucher reduced employment rates and earnings amounts in the first year or two after random assignment, but the small negative impact of vouchers disappeared over time, and vouchers had no significant impact overall on employment and earnings over 3.5 years of follow-up. (See Abt Associates et al., 2006.) Shroder's (2002) analysis of 18 nonexperimental studies of the impacts of housing vouchers on employment and earnings suggests short-term employment effects closer to zero. Research also suggests that housing assistance might actually reduce work efforts; see Jacob and Ludwig (2008).

[19]The HUD Rent Reform demonstration, which MDRC is conducting, is testing an alternative rent policy that creates a greater financial incentive for tenants to work and to increase their earnings. The randomized controlled trial will determine whether the new policy improves tenants' labor market outcomes.

[20]Popkin, Theodos, Getsinger, and Parilla (2010); Popkin, Cunningham, and Burt (2005); Popkin, Buron, Levy, and Cunningham (2000).

subsidies, could free up resources to serve more eligible families with a fixed amount of funding.

Promoting Work and Self-Sufficiency Through the Family Self-Sufficiency Program

HUD's FSS program is the main federal strategy to support employment among housing voucher holders and to help them build financial security. Established in 1990 by Section 554 of the Cranston-Gonzalez National Affordable Housing Act, FSS emerged against a backdrop of policy discussions about persistent poverty among participants of government benefit programs. Jack Kemp, the Secretary of Housing and Urban Development from 1989 to 1993, a strong proponent, argued for the creation of programs that promoted economic mobility and eventually helped families make the transition off government assistance.[21]

Nationally, most FSS programs are operated by housing agencies administering public housing or housing voucher programs.[22] Guided by HUD regulations, FSS programs are structured around two core components: an escrow savings account (a longer-term financial incentive for households to increase work and earnings, described in more detail later) and coordination of supportive services. Together, these components are expected to help families to go to work, increase earnings from work, reduce reliance on cash assistance programs, build assets, and make the transition to financial independence. With the exception of the escrow account, the PHAs can decide how to structure their case management and case coordination services — an element of flexibility in the original legislation.

For voucher holders, participation in FSS is voluntary. Housing agencies promote the program through various means, including flyers and program brochures in housing application packets, PHA newsletters and websites, group orientation sessions at the housing agency, and through their connections to community partners. Informal channels, such as referrals from friends and relatives, also help spread the word about the program. Once enrolled, individuals complete a Contract of Participation, which specifies their goals and steps for making progress toward self-sufficiency over the course of five years, which can be extended to a total of seven years.[23] The case coordination services offered through FSS are designed to help participants access services that will help them achieve these goals. While all adults in FSS households are

[21]See Emple (2013) for a discussion of the origin of the FSS program.

[22]While HUD funds housing agencies to operate FSS for HCV tenants and public housing residents, this discussion is focused on FSS for HCV households. The description of FSS draws on Emple (2013), Cramer and Lubell (2005), Ficke and Piesse (2004), Lubell (2004), and HUD and other public documents.

[23]Circumstances beyond the participant's control, such as involuntary loss of employment or serious illness, may qualify the participant for an extension.

encouraged to seek employment, only the household head — the voucher holder — is expected to meet the employment goals of the FSS contract.

The escrow account is designed to encourage participants to increase their work efforts and build savings while continuing to receive housing assistance. As noted above, in the HCV program, any increase in household income results in an increase in the amount of rent the household must pay. To address the potential dampening effect this might have on individual employment decisions, FSS allows participants to save money through an escrow account while paying more in rent: FSS participants pay higher rent when their earnings increase, but an amount based on the *increase* in the tenant's share of rent caused by increases in earned income is deposited into an interest-bearing escrow account; in other words, for the most part, escrow balances grow when earnings grow. This potential to build assets is meant to encourage participants to invest in themselves and make longer-term plans for the future, with the ultimate goal of producing other important effects for family well-being, such as more financial security, the possibility of moving out of subsidized housing, and home ownership. The housing agency manages the escrow accounts and shares annual statements with participants to keep them informed about their balances. Accrued escrow deposits are paid out upon completion of the FSS Contract of Participation — which qualifies the participants to graduate from the program.

To graduate from FSS, and earn the escrow accrued, the head of household must complete the activities listed in the Individual Training and Services Plan, be employed, and become independent of public cash assistance — that is, no member of the family receives TANF cash assistance for at least the last 12 months before graduation.[24] If the head of household is not employed, and an increase in earned income is achieved by someone other than the head of household, the family is not eligible to receive escrow at the time of graduation, a potentially problematic aspect of the escrow component for households with multiple adults. In addition, as discussed later in this report, it is also possible for participants to graduate from FSS and not receive any escrow; this could happen for various reasons, including having no changes in earned income, which are necessary to trigger escrow credits. Thus, it cannot be assumed that all FSS participants who graduate from the program do so with some amount of escrow.

No restrictions are placed on FSS participants' use of their escrow funds, but housing agencies report that families most commonly use their resources to start a new business, buy a home, or pay for education. Interim disbursements are also considered by some programs, as

[24]According to HUD rules, the receipt of food stamps (through the Supplemental Nutrition Assistance Program, or SNAP), medical assistance, child care assistance, work supports such as transportation assistance or short-term benefits under TANF, or disability benefits for another family member is not considered welfare assistance.

long as participants use the funds to meet approved expenses related to their self-sufficiency goals.[25]

While escrow is a key feature of FSS, little national data exist on the extent to which FSS participants actually accrue escrow, and how much escrow they graduate with. A HUD study provides partial information for a national sample. Tracking 181 FSS participants from 14 programs across the country, the study showed that after four years in FSS (less than the full five-year term of the program), 24 percent of the study participants had met program requirements and graduated, with an average escrow balance at the time of graduation of about $5,300. In addition, 37 percent had left the program before graduating, forfeiting their escrow, and the status of 39 percent remained unknown because the participants were still enrolled in FSS when the study ended.[26] Participants can drop out of FSS at any time without losing their housing voucher, but those who leave without completing their contract or who fail to comply with HCV or FSS program requirements lose their escrow savings. Participants can also be terminated from FSS for failing to comply with the terms of the Contract of Participation.

Nationally, FSS reaches around 5 percent of all voucher families.[27] Limited HUD funding for FSS remains a large issue for scaling up or operating more effective programs. In the last round of annual grants, HUD made available about $75 million in funding for FSS. (A small fraction of HUD's budget is reserved for self-sufficiency efforts.) The FSS grants offer support for case coordinator positions, with no provisions for program management or other related administrative costs.[28] HUD data show that the number of FSS participants can range from as few as 4 participants to more than 1,000 in the largest program.[29] Thus, while FSS is the only federal initiative aimed at helping voucher holders improve their work outcomes and reduce their need for housing subsidies and other government benefits, it remains a small program at the federal and local levels.

[25]As described by program operators, partial disbursements of the escrow before graduation from the program can be approved for expenditures such as tuition, car purchase, credit repair, home ownership, or business start-up.

[26]de Silva, Wijewardena, Wood, and Kaul (2011).

[27]de Silva, Wijewardena, Wood, and Kaul (2011).

[28]FSS funding is available from HUD to support FSS coordinators through a competitive Notice of Funds Availability (NOFA) process. Housing agencies have to apply for this funding on an annual basis. According to the 2016 NOFA, a full-time FSS program coordinator is expected to serve approximately 50 FSS participants, depending on the coordinator's case management functions. However, housing agencies may not receive the full level of funding needed to operate their programs. Within the total award, PHAs can choose to allocate higher than the maximum salary to any particular program coordinator(s). In 2016, HUD imposed the salary cap of $69,000 for new positions only.

[29]These findings are from an internal MDRC analysis of HUD FSS grant notices.

The Demonstration and Evaluation

The Work Rewards demonstration encompassed two distinct but related random assignment studies. The first one — the FSS study — involved individuals who were receiving housing vouchers from HPD. Operating one of the largest FSS programs in the country, HPD was beginning to modify its program in 2007 and agreed to subject it to a test as part of the Work Rewards demonstration. Eligible HPD voucher holders in the FSS study were randomly assigned to one of three research groups: FSS-only, which received the FSS program components alone; FSS plus the special work incentives ("FSS+incentives" in this report), which received the FSS program components *plus* short-term cash incentives to work full time; and a control group that received neither FSS nor the special incentives (with a few exceptions, discussed in Chapter 2), as shown in Table 1.1. This design allows for a few types of comparisons. The analysis comparing the FSS-only group with the control group shows whether HPD's

Table 1.1

Services Offered to Research Groups in the FSS Study

	FSS Study		
Services Offered	FSS-Only	FSS+Incentives	Control Group[a]
Case management services	Yes	Yes	No
Escrow savings account	Yes	Yes	No
Work incentives[b]	No	Yes	No
Information on community resources	Yes	Yes	Yes

NOTES: [a]If interested in FSS services, control group members were eligible to apply to the FSS program operated by the New York City Department of Housing Preservation and Development (HPD) at LaGuardia Community College. Eighty-one control group members (about 17 percent of the control group) signed up for FSS, which allowed them access to FSS services and the escrow savings account.

[b]"Work incentives" refers to the cash "reward payments" that participants could earn immediately for meeting employment and training requirements; they do not include the escrow account. Work incentives were offered for a two-year period, starting in September 2008.

implementation of the FSS program in New York City improves work, earnings, and other indictors of well-being compared with the control group. Comparing the FSS+incentives group with the control group shows whether the enhanced FSS program improves the same types of outcomes compared with the control group. And, comparing those who were offered the FSS program alone with those who were offered FSS+incentives shows whether the immediate work incentives "add value" to the effects that FSS produces on its own.

The Work Rewards evaluation draws on extensive qualitative and quantitative data (shown in Table 1.2) to report on participant experiences, program impacts, and program benefits and costs. Data studied encompass employment rates, earnings, welfare and food stamp payments, and housing subsidy receipt rates, obtained from various New York City and New York State agencies' administrative records; FSS services and milestones, recorded in a data system used by the program operators; FSS graduation and escrow outcomes reported by HPD; in-depth survey responses by FSS study participants about 42 months after they enrolled in the program; in-depth interviews with a sample of FSS participants and nonparticipants; observations of program operators selected to implement Work Rewards; and program operation costs.

Table 1.2

Data Sources for the FSS Study

Data Source	Months for Which Data Were Collected
Unemployment insurance wage records	April 2005 - June 2015
Temporary Assistance for Needy Families/Safety Net records	April 2005 - June 2015
Food stamp records	April 2005 - June 2015
Program participation data from Seedco	July 2008 - June 2013
Housing authority records from HPD	January 2008 - June 2015
Program observations and staff interviews	January 2008 - October 2013
Tenant survey	September 2011 - April 2012

NOTES: The follow-up period for each quantitive measure calculated with administrative records is 6 years from each participant's random assignment date. The follow-up period for each measure on the tenant survey is about 42 months from each participant's random assignment date.

HPD is the New York City Department of Housing Preservation and Development.

Beyond New York City: HUD's National FSS Evaluation

While Work Rewards provides the only comprehensive and rigorous assessment of an FSS program, it focused on a single city and on a program that was implemented in ways that differed from FSS implementation in other cities: It targeted very low-income voucher holders and used a programmatic framework that prioritized a focus on work in the short term. In March 2012, HUD selected MDRC to conduct a national evaluation of FSS, making it possible to begin to build evidence that goes beyond the New York City experience and further test whether HUD's foremost employment and self-sufficiency initiative helps voucher holders achieve economic independence and improve their quality of life.

The national FSS evaluation also relies on random assignment and a comprehensive evaluation agenda, encompassing detailed implementation research, impact analyses, and a benefit-cost analysis. To generate results and lessons that are broadly applicable, the evaluation includes PHAs with varying program implementation practices, sizes, labor and housing market conditions, and characteristics of study participants. Eighteen housing agencies in seven states — California, Florida, Maryland, Missouri, New Jersey, Ohio, and Texas — are participating in the evaluation. In January 2015, the evaluation completed enrolling over 2,600 voucher holders, with half assigned at random to a program group eligible for FSS and the other half assigned to a control group not eligible for FSS. MDRC will follow both groups through 2018 to assess the program's effects on work, well-being, and other outcomes.

Given the range of sites in the study, the national evaluation will provide evidence on the effectiveness of FSS across different cities and local contexts and as implemented in a variety of ways for diverse populations. If the findings on FSS from the Work Rewards demonstration and the national FSS evaluation align, they would provide reinforcing evidence on the extent to which FSS by itself can help promote self-sufficiency for the participants overall, or for those not working at enrollment. Where findings diverge, they may point to important lessons about how context, program practices, and the types of people enrolled in FSS influence the program's effectiveness. The first results for the national evaluation are expected to be available in late 2017.

Structure of This Summary Report

The summary report unfolds in a set of seven short chapters. Chapter 2 provides more details on the design and justification of the FSS study, its program operations and delivery structure, and the people enrolled. Chapter 3 presents the first look at FSS graduation rates and escrow disbursements, outcomes that signal participation success from HUD's perspective. Taking advantage of the random assignment design, Chapters 4 and 5 look at the full follow-up period for the demonstration and summarize the impacts of FSS (both with and without the special

work incentives) on employment, earnings, and receipt of government benefits — assessments based on comparing the outcomes of individuals assigned to the program group with those of individuals assigned to the control group. Chapter 6 takes a benefit-cost approach to examine the findings and ask whether FSS programs are beneficial from individual, government, and societal perspectives. The final chapter concludes with an overall assessment and distills lessons and observations for the design and implementation of FSS and future self-sufficiency interventions for housing-assisted households.

Chapter 2

The Interventions, Samples, and Implementation Highlights

The Work Rewards demonstration was developed to test distinct strategies to promote self-sufficiency among housing voucher holders. As the only random assignment evaluation of the Family Self-Sufficiency (FSS) program in the United States, the demonstration was laying the groundwork for generating the first evidence about this program's effectiveness. The launch of this demonstration, however, coincided with some major service delivery changes that the housing agency was implementing: in particular, engaging local community-based organizations (CBOs) — instead of the housing agency — to operate FSS, a shift to make the program more accessible to voucher holders throughout the city.[1] The newly hired CBOs, who had less familiarity with FSS, had to learn the program and set up case management practices to conform with New York City Department of Housing Preservation and Development (HPD) requirements. They also had to master the many aspects of launching a research demonstration: sample recruitment, enrollment, and random assignment. As documented in two previous reports, the implementation of the FSS program as part of the demonstration was a complex endeavor. In the end, the CBOs successfully enrolled the target sample. They also faced some implementation challenges, and their program operations evolved over time. Despite this context, the participating organizations delivered the basic components of the local FSS program, although not as robustly as originally hoped. This chapter briefly reviews how the interventions were structured, the recruitment process and the sample selected, and some key program delivery and implementation highlights.

The Structure of the Interventions

Eligible HPD voucher holders who volunteered for the FSS study were randomly assigned by MDRC to two program groups (FSS-only and FSS+incentives) and one control group. Participants assigned to the FSS-only group completed a Contract of Participation (COP) and became eligible for building escrow, as described in Chapter 1. They were also offered case management assistance to help with their employment goals and access job search, education, training,

[1]At the start of Work Rewards in 2007, HPD was operating a small FSS program in New York City through a contract with LaGuardia Community College's Division of Adult and Continuing Education. The partnership between FSS and LaGuardia Community College was recognized by HUD as a promising practice. Based in Queens, New York, the FSS program provided employment-related assistance and support services to program participants citywide, but they had to travel to Queens to receive those services — not an easy or quick commute for the many individuals living in other boroughs of the city.

and supportive services. In addition to FSS case management and the escrow account, participants assigned to the FSS+incentives group were offered special cash work incentives for achieving two employment-related activities: securing full-time work and completing approved education or training courses (described below).

Individuals assigned to the control group were not eligible for services or the special incentives through the FSS study. However, if control group members were interested in FSS, they were eligible to apply to the FSS program operated by HPD at LaGuardia Community College, which was not part of the Work Rewards demonstration but had a history with the FSS program.[2] FSS enrollees at LaGuardia could access FSS program services offered through LaGuardia (but not through the Work Rewards CBOs). Allowing control group members to enroll in FSS did not pose a significant threat to the evaluation.[3]

The special work incentives were available for two years following enrollment in the study and were designed to support and encourage participants' investment in their own immediate employment and human capital development for their longer-term economic well-being. Participants earned the modest incentives when they met the following two conditions:

- **Sustained full-time employment.** To receive this reward, a participant had to be employed for at least 30 hours per week for six out of every eight weeks (eight weeks making up a program "activity period"). Allowing for some periods of no work was a way of acknowledging that low-wage workers face a fair amount of job instability and may take time to find a new job. Participants who worked the minimum amount received $300 every two months, or up to $1,800 per year. The cash reward was intended to create an incentive for participants to get a job or, if already working part time, to move into full-time work. Participants working 40 hours per week at $8 per hour, for example, could increase their net wages by 11 percent, to about $8.90 per hour, if they earned the program's employment reward.

- **Successful completion of approved education and training courses.**[4] Full compliance with this condition earned a participant $300, $400, or $600 for a

[2]Voucher recipients who were normally eligible to enroll in FSS could not be denied program services.

[3]As of Year 6, about 18 percent of the control group had signed up for FSS services at LaGuardia Community College. For the sake of the study, it would have been important to keep the control group from enrolling in the FSS program, but it would not have been fair to deny them access to the escrow account, which they were entitled to receive if they requested it.

[4]Approved education and training courses included those in programs listed on New York State's "Eligible Training Provider List" and those approved by New York City's Department of Small Business Services, the New York Bureau of Proprietary School Supervision, and New York State's Office of Higher Education.

course, depending on its length, up to a total of $3,000 for the duration of the program. Originally, to earn this reward, the participant was required to work at least 10 hours per week while attending an approved training course of at least 35 hours, which also had to be completed successfully.[5] This minimum work-hours requirement was an attempt to discourage participants from remaining unemployed or from dropping out of the labor force in order to undergo training. However, given the low take-up rate of this incentive and the possibility that the economy was affecting participation, the minimum work-hours requirement was eliminated for the second year of the program.

These special incentives were included to test whether the offer of an immediate financial reward geared toward promoting work would help counteract the potential effects of the rent rules governing housing vouchers. Per U.S. Department of Housing and Urban Development (HUD) regulations, voucher holders pay 30 percent of their adjusted income in rent, with the government making up the difference — a family's rent contribution and utility payments are referred to as its *total tenant payment* (TTP). Thus, an increase in a household's income normally results in an increase in TTP. Hypothetically, the rent structure discourages work because for every additional dollar in earnings reported by the family, nearly a third (around 30 cents) goes to increased rent payments. Generally speaking, the FSS program's escrow component is intended to counter this problem by saving the earnings-generated rent increases on behalf of the tenant.[6] However, the escrow strategy can be difficult to explain to tenants, since they must still pay higher TTP and do not have access to the money saved for them in the escrow account for several years. There is also reason to believe that the long-term nature of the escrow savings limits the appeal of the program and its work incentives to a narrower — and more selective — slice of the potentially eligible population of residents than would other alternatives that offer more immediately accessible rewards. The special work incentives, in contrast, offered a more immediate reward for boosting earnings through sustained full-time work and for acquiring human capital that might improve tenants' earnings capacity in the future.

[5]Instruction could include not only specific occupational skills training but also instruction in English as a Second Language (ESL), Adult Basic Education (ABE), and General Educational Development (GED) preparation.

[6]The exact amount of the escrow credit is based on increases in the family's total tenant payment resulting from increases in the family's earned income during the term of the FSS contract. The public housing agency deposits to an escrow account an amount based on one of two formulas: one for very low-income families and one for low-income families. Very low-income families are those whose annual incomes are at or below 50 percent of the median income for the area, and low-income families are those with annual incomes between 50 percent and 80 percent of the area median income. Families whose income goes above the low-income limit (above 80 percent of the median) do not receive any escrow credit, but they may continue as participants in the FSS program through the end of their contract. For more information, see U.S. Department of Housing and Urban Development (n.d.).

It may be, of course, that the FSS program and the special work incentives would make a bigger difference in combination than either of these programs would make alone. For example, the work incentives offer might strengthen a participant's interest in striving to work more steadily and to build skills, but the participant may need services and supports in order to do so. The FSS program would offer that person case management, job coaching, and service referrals — plus a longer-term work and asset-building incentive (that is, the escrow component). Perhaps encouraged by the direct and immediate incentive, voucher participants may take much fuller advantage of what FSS has to offer them than they would normally. Recognizing that a combined FSS+incentives intervention might be especially potent because of its mutually reinforcing features, the demonstration includes this option as one of the interventions it tests.

Participants could qualify for both work and education incentives, and payments were made electronically into their bank accounts, which the program helped establish for those who did not already have one. Rewards earned through these incentives could be withdrawn at any time. The reward payments did not count as income, so they did not affect the calculation of a participant's housing subsidy.[7]

Sample Recruitment

The Work Rewards FSS program targeted the most disadvantaged of those receiving housing vouchers: It screened for household income, targeting those living at or below 130 percent of the federal poverty level,[8] rather than for motivation to pursue self-sufficiency goals, as is allowed by HUD. It also employed a particularly persistent outreach and recruitment effort. As a result, Work Rewards provided an opportunity to explore the feasibility of recruiting voucher holders with a wide variety of characteristics into an employment-focused program. Box 2.1 highlights some important ways in which the enrollment and recruitment practices of the Work Rewards FSS study differ from those of other FSS programs nationwide. While many of the challenges that arose in the recruitment process for this study mirror those experienced by FSS programs throughout the United States — and while the experiences can offer lessons for other

[7]Work Rewards payments did not affect Temporary Assistance for Needy Families (TANF), food stamps, housing subsidies, or the earned income tax credit, but they could potentially count in determining eligibility and payment amounts for Supplemental Security Income.

[8]The income criterion was applied to HPD data to identify eligible households for recruitment purposes. While HPD's voucher program serves a broader range of low-income households, the cutoff used for Work Rewards is the same as the eligibility standard used for food stamps and a number of other public benefit programs that serve very low-income families, making it a widely accepted benchmark for identifying families in need of government public assistance programs. Elderly and disabled households were not excluded from the recruitment lists.

Box 2.1

Some Ways in Which FSS Tested in New York City Differs from FSS Elsewhere

The Family Self-Sufficiency (FSS) interventions tested in New York City are distinct in a few important ways from how the program operates elsewhere in the country. First, in an attempt to make the program more easily accessible to families, the New York City Department of Housing Preservation and Development (HPD) recruited community organizations to operate its FSS program, a change from how the program had operated before Work Rewards began. These organizations were relatively new to FSS, and it took time for staff to learn the more complicated aspects of the program — for example, how the escrow account works. In FSS programs that are operated by public housing agencies (PHAs), housing specialists are immediately available to help FSS staff and to clarify for families how their earnings, rent, and escrow balances interact.

Second, in keeping with the FSS study guidelines, the community organizations made an effort to reach a representative subset of eligible voucher holders from recruitment lists made up of randomly selected households and encourage them to enroll in the study — by design, making an aggressive recruitment effort to increase the reach of the program well beyond the most motivated, who voluntarily step forward to enroll in FSS. This approach contrasts with the practice of FSS programs nationally, which do not conduct such aggressive recruitment for the program or give priority to those participants who are most motivated to enroll (by screening individuals who volunteer for the program for motivation). Further, families who were recruited into the FSS study were informed that they would be assigned to one of three groups, including a control group — a situation that is not standard for FSS nationally.

Third, Work Rewards' FSS study targeted voucher holders with household incomes at or below 130 percent of the federal poverty level, an effort to test the program on those who might need it the most. Combined with aggressive recruitment, the program enrolled a reasonably representative sample of targeted households to test the effectiveness of the program for a particularly disadvantaged group of tenants, not just those who volunteer for a self-sufficiency program. Thus, outcomes from this demonstration best represent the experiences of the types of voucher holders targeted by Work Rewards.

Fourth, and finally, the use of short-term financial incentives for work-related behaviors, over and above the distant escrow account, is another feature that differentiates Work Rewards' FSS program. While the federal FSS framework does not stop housing agencies from offering additional financial incentives to motivate work and human capital development (and some have flexible resources to reward achievement of interim goals), the funding constraints under which the PHAs operate this program could make this type of feature almost impossible for most housing agencies to consider.*

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*However, housing agencies with Moving-to-Work (MTW) designations, a demonstration program for public housing agencies, have more flexibility and can use their U.S. Department of Housing and Urban Development funding to offer various types of financial incentives. The MTW designation gives housing agencies more flexibility with how they use their federal funds.

programs — recruitment for the Work Rewards FSS program included some features that are not typical of other FSS programs. Aside from targeting a broader population, recruitment for FSS occurred within the context of a research demonstration. In addition, it offered the possibility of being selected to receive special cash rewards tied to employment or training, above and beyond FSS services.

Roughly 26 percent of the households receiving HPD vouchers in 2007 were eligible for Work Rewards — that is, their household income fell at or below 130 percent of the federal poverty level.[9] Nationally, eligibility for enrolling in FSS programs is not determined by income; any housing voucher holder is eligible for the program, but the lower income-eligibility threshold used in Work Rewards was seen as a way to target those voucher holders most in need of an intervention that focuses on self-sufficiency.

For the purposes of the evaluation, all adults (head of household and other adult members) in an eligible household who wanted to participate in Work Rewards were required to provide MDRC permission to collect their data and go through the study enrollment process at the same time. HPD engaged 14 CBOs to recruit 2,100 eligible households across a variety of New York City communities. Located in the boroughs of the Bronx, Brooklyn, and Manhattan, the CBOs had to contact and enroll households identified through lists of income-eligible voucher holders compiled by HPD. The recruitment process began in January 2008; it was hoped it would last only four to six months, but the CBOs encountered a number of obstacles that required extending the recruitment period until January 2009.[10] By that time, the CBOs had successfully enrolled 1,947 volunteer households, representing about 93 percent of the original target. The use of home visits and persistent outreach through phone calls and mailings to targeted households ensured that CBOs enrolled more than just the easiest-to-reach households, who were potentially more likely to work toward self-sufficiency on their own.

Although the sample enrollment goals were met, recruitment for the FSS study was difficult. In some cases, eligible individuals were simply uninterested in the intervention, despite being offered job placement program services and the potential monetary gain of the escrow savings account and reward payments. Others were elderly, disabled, or generally unable to take advantage of an employment-focused program. Lastly, some worried that their engagement in the study would jeopardize their housing subsidy. Added to these obstacles, CBO staff found that the contact information provided by the housing agency was no longer current for many households. This required the CBOs, HPD, MDRC, and Seedco to search for updated contact information and attempt alternative contact strategies.

[9]This percentage includes elderly and disabled households, who were later excluded from the core sample but examined as part of the full sample, as explained in the next section.

[10]See Chapter 2 in Verma et al. (2012) for a full description of the recruitment and enrollment process.

Who Enrolled?

A total of 1,947 households (2,168 adults) enrolled in the FSS study. The evaluation findings covered in this report focus on 1,455 households (1,603 adults). Referred to as the "core" FSS sample, this group includes only working-age (between the ages of 18 and 62) and nondisabled adults. Given its emphasis on employment as a means of gaining self-sufficiency, the FSS program was intended to target individuals who were interested in and capable of working, which in many cases precludes elderly and disabled individuals. However, ability and interest in working were not eligibility requirements, and if elderly or disabled individuals were interested in enrolling, they were permitted to — though FSS services were often not especially relevant to their needs. These sample members made up 23 percent of the total enrolled sample and are excluded from the core analysis.[11] However, results were examined for the full sample, including those excluded from the core, and those results mirror the patterns observed for the core sample.[12]

The households in the core sample were predominantly single-adult households with children (63 percent). Households with more than one adult included some households with married parents and some households with adults of multiple generations living together. Because of their low incomes, study sample households were also often receiving nonhousing public benefits at the time of enrollment, with 18 percent receiving Temporary Assistance for Needy Families (TANF), 69 percent receiving food stamps, and 77 percent receiving public health insurance. However, 13 percent reported not receiving TANF, food stamps, or public health insurance. The take-up rate of public benefits suggests that the final sample generally met the established income targets for the study; only 9.6 percent of households had earnings above 130 percent of the federal poverty line.

Comparison of Enrollees and Non-Enrollees

To assess whether households in the study were generally similar to the broader target population, selected demographic characteristics of the core sample members enrolled in the FSS study were compared with those for a similar pool of HPD voucher recipients who met the same income eligibility requirements but chose not to enroll in the study. Comparing these two

[11]The core sample also excludes 14 sample members (0.7 percent) who are potentially part of the Hasidic community, an Orthodox Jewish community that is larger in New York City than in other areas of the United States. The community has a unique culture that was expected to result in important differences in their employment goals and experiences in comparison with most other voucher recipients. Given this, a decision was made prior to the data analysis not to include participants identified as potentially Hasidic in the core sample.

[12]These analyses are available from the authors on request.

samples provided a check on whether the FSS study sample was representative of the larger target population of voucher holders.

The comparison showed strong similarities between the enrolled and non-enrolled voucher holders. The FSS study sample has a slightly larger proportion of individuals who identify as black, non-Hispanic/Latino and a slightly smaller proportion who identify as Hispanic/Latino and white, non-Hispanic/Latino than the sample that did not enroll. However, both groups are similar in terms of household size and the portion they pay in rent. These results strongly suggest that the recruitment efforts led to a fairly representative sample of the eligible HPD voucher recipient population, at least in terms of *measurable* background characteristics.

To further place the Work Rewards FSS study within the context of FSS programs nationally, the characteristics of the Work Rewards FSS study sample were compared with characteristics of FSS participants from a national FSS impact evaluation that is currently under way.[13] Given the eligibility criteria used, the expectation was that the Work Rewards FSS study sample would be more disadvantaged than the national sample. The national FSS impact study was designed as an attempt to capture FSS as normally run in all its variations and for the populations it usually serves. As a result, sample recruitment was not targeted at specific populations, and the standard recruitment activities of the public housing agencies were only slightly modified for study enrollment. And, overall, at least on measured demographics and background characteristics, the Work Rewards and FSS national samples are broadly similar. Although the FSS national evaluation did not specifically target households below 130 percent of the poverty line, based on SNAP receipt at baseline, the estimated percentage of households below that threshold in each sample is essentially identical. On other measures, including work status at random assignment, age, and benefit receipt, the samples are broadly similar.[14]

Program Operations and Participation

The Work Rewards demonstration operated from 2008 to 2014. Its program operations were primarily managed by HPD and Seedco, with input from MDRC and the Mayor's Office for Economic Opportunity, or NYC Opportunity (formerly New York City's Center for Economic Opportunity).[15] Through a competitive process, HPD selected five CBOs to deliver FSS services to participants; those CBOs held contracts directly with HPD. HPD also designated

[13]See www.mdrc.org/project/family-self-sufficiency-program-evaluation.

[14]MDRC preliminary analysis of baseline data collected for the sample in the national FSS evaluation.

[15]Two previous reports provide more detail on the program's operations and implementation experiences: Verma et al. (2012) and Nuñez, Verma, and Yang (2015a).

case managers at the housing agency who were available to assist FSS clients, as well as CBO staff, with Housing Choice Voucher issues and questions about the FSS escrow account.

Seedco played several roles with regard to FSS: It had an arrangement with NYC Opportunity to manage the CBOs' contracts (that is, to oversee and manage the process by which the CBOs were paid for their FSS work), to provide performance management for the CBOs (that is, to put in place procedures to encourage the highest possible performance), and to offer technical assistance and training to the CBOs.[16] As part of its management of the CBOs, Seedco held monthly management meetings for CBO staff; provided regular management reports and performance matrixes to keep CBOs informed about their performance in meeting the goals of the FSS program; and conducted site visits, training, and technical assistance on FSS service delivery and contract-related issues as the need arose.

While MDRC and NYC Opportunity were visible partners in the design of the Work Rewards demonstration, they had no direct operational role in the FSS program. However, as MDRC was the overall manager of the demonstration and the programs' evaluator, its staff observed program practices at Seedco and the CBOs and offered formative feedback to these organizations based on those observations. MDRC staff also explored ideas together with HPD, Seedco, and CBO staff as they considered ways to continue improving their operation of the program. These decisions included a policy revision that made it easier to earn one of the workforce incentives and a move to place more emphasis on marketing the escrow account in the second year of the program, also described later in this report.

Early in the rollout of the FSS study, program designers observed a need to strengthen the program's focus on employment. The performance-based contracts executed with the CBOs, which were structured around prespecified milestones (shown in Table 2.1), were geared toward activities such as conducting needs assessments or linking clients to public benefits or family support services. These activities might help address important family needs and contribute to employment results in the longer term, but they were not necessarily services that would help the clients with their work-related goals in the shorter term — thus constraining the CBOs' flexibility and potentially limiting the attention they placed on work outcomes.

Starting in April 2009, MDRC, Seedco, and HPD restructured the service delivery strategy, revising the service milestones to make sure they were aligned with services that would help participants advance toward their self-sufficiency goals. MDRC, Seedco, and HPD

[16]MDRC held a contract with NYC Opportunity to implement the Work Rewards demonstration and conduct the evaluation. Seedco held a subcontract with MDRC to conduct contract and performance management for FSS, as well as to manage the reward payments component of the demonstration.

Table 2.1

Family Self-Sufficiency Program Milestone Submission Guide

FSS Milestone	How CBOs Document Milestones
1. Needs assessment (definition of payment point includes needs assessment, credit check/score, and self-sufficiency plan)	Copy of completed needs assessment form with caseworker and client signature; copy of credit score; print-out of screening summary for Self-Sufficiency Calculator, *Earn* Benefits, or Access NYC.
2. Case management and follow-up services	Copy of progress notes; copy of completed Case Manager Referral form; attendance sheets of CBO activities such as peer support sessions; phone logs; referral forms documenting client contact.[a]
3. Linked to family-based support services	Copy of referral form and confirmation of participation or acceptance into program.
4. Attended financial literacy class or other asset-building service	One of the following: copy of certificate of completion from agency, bank/Individual Development Account (IDA) statement, or credit counseling documentation.
5. Linked to benefits or work supports	One of the following: copy of completed Case Manager Referral form or copy of benefit receipt letter/notice. If using *Earn* Benefits, submit one of the following: copy of "My Results" page or copy of screening history with benefit receipt follow-up note. If using a comparable tool, connect with HPD to identify a similar approved page.
6. Credit improved	Document tasks undertaken to improve score (debt consolidation, copy new credit score, etc.).
7. Started employment	Copy of pay stub or letter of employment on company letterhead.
8. Continuous employment - 30 days	Dated pay stub or employer letter.
9. Continuous employment - 90 days	Dated pay stub or employer letter.

(continued)

Table 2.1 (continued)

FSS Milestone	How CBOs Document Milestones
10. Continuous employment - 180 days	Dated pay stub or employer letter.
11. Wage gain/promotion	Copy of health insurance documentation or letter from employer on letterhead detailing change in job title.
12. Began education/training program	Copy of registration or letter from course instructor on letterhead.
13. Education upgrade	Copy of GED certificate or awarded degree/certificate.

SOURCE: Seedco program materials.

NOTES: CBO is community-based organization. HPD is the New York City Department of Housing Preservation and Development. GED is General Educational Development.

[a]Starting in 2012, HPD relaxed the documentation requirements for this milestone.

also recognized the need to focus more attention on the escrow account. In an effort to increase participants' awareness of the escrow component, Seedco devised new marketing strategies, which included special mailings and automated phone calls to program group members. However, FSS program staff mostly continued to wait for queries rather than perform active outreach, and they referred participants who contacted them to HPD housing agency case managers for more specific information. In addition, observational and interview data revealed that many participants did not fully understand how the escrow account worked, and CBO staff also struggled with the details of the program. Most participants (over 88 percent) were aware of the escrow component, and over 50 percent had an escrow balance, but many did not correctly understand some of the criteria for qualifying for an escrow payment, and few understood all of the criteria. Thus, it is possible that they did not fully realize the value of the escrow account as a financial incentive.

With NYC Opportunity funding for Work Rewards ending in mid-2010, HPD executed contracts with three of the original CBOs to continue FSS program operations. In 2011, with full support for FSS now coming exclusively from HUD, HPD directed the Work Rewards CBOs to expand their services beyond the FSS study participants — that is, to those who had been enrolled in FSS prior to the launch of the study through LaGuardia Community College. While these participants had been eligible to receive services at LaGuardia after the launch of Work Rewards, but not at the Work Rewards CBOs, they were now being invited to receive

services at those CBOs, along with those who were enrolled in Work Rewards. (These participants are not considered part of the Work Rewards study sample.)

In addition, as few FSS participants were engaging with the program (discussed below), the CBOs expressed frustration that their client base was not robust enough to support a lot of services. (See Box 2.2 for some of the barriers to engagement, from qualitative data collected early in the program.) To reinvigorate the program, HPD had the CBOs initiate broad outreach to enroll new program participants, this time including voucher holders who were collecting unemployment benefits (so, not just those under 130 percent of the poverty level, the target group for the Work Rewards sample). With the infusion of new FSS participants, the CBOs focused their services on those more newly enrolled in FSS (that is, program participants who were not part of the demonstration), possibly diverting some of the effort that would otherwise have been targeted toward those enrolled in the study.

The overall partnership/contract arrangement among HPD, Seedco, and the CBOs also changed after NYC Opportunity funding ended in 2010. Until then, although MDRC did not have a direct operational role in the demonstration, MDRC staff observed program practices and offered formative feedback to Seedco, HPD, and the CBOs. Once funding ended, MDRC's technical assistance role ended also. On the operations side, HPD, which was administering the CBO contracts and payments as well as overseeing and reconciling the escrow deposits, assumed Seedco's management and oversight role and worked directly with the CBOs to oversee their contracts and performance management — with no increase in staffing or budget.

In 2012, with the five-year FSS term in sight for many of the Work Rewards enrollees, HPD instituted a structured Year 4 check-in with program participants, targeted to those with some escrow accrued. At the meetings, staff made sure that participants were aware of their graduation requirements and were actively working toward meeting them. The meeting was also used to remind participants that they could forfeit their escrow if they did not meet the requirements. Per HUD regulations, to be eligible for escrow, the head of household must be working on the day of graduation, and all household members must be off cash assistance for 12 consecutive months leading up to graduation.[17] HPD also used this meeting to make sure participants completed the COP in a way that was consistent with HUD's requirements.

[17]As noted earlier in this chapter, adult family members other than the head of household can obtain employment and increase their earnings, thus generating escrow for the household, but the escrow would be denied if the head of household for Section 8 purposes is not employed at the time of graduation.

Box 2.2

Keeping Participants Engaged in FSS: Some Highlights from Early Findings

MDRC's early report on Work Rewards presented an in-depth qualitative analysis on the low levels of engagement in the FSS program within the first 18 months of the program.* The interim report showed that participation in the FSS program, among both the FSS-only and FSS+incentives groups, remained low 42 months after the time of random assignment.† A summary of reasons contributing to low engagement with the program is provided here.

- "Need-based" interaction with FSS program staff. CBO staff found that FSS participants were difficult to engage unless they needed something. One case manager remarked, "Even though you explain to them the services that are available, they don't think they need those services…especially if they already have jobs."

- Lack of screening for interest or motivation to participate in FSS. Unlike other FSS programs, the Work Rewards program was aggressive in its effort to recruit individuals to enroll in FSS and keep them engaged. CBOs did not terminate any enrolled individuals from the program, regardless of interest or motivation level, which is not typical of nationwide practices.

- Participation in mandatory programs. The services that FSS provided — ongoing case management, education or training, and job search — did not qualify to fulfill the HRA requirements for TANF recipients to participate in the Work Experience Program, in order to continue receiving benefits. Participants receiving TANF often chose to meet mandates instead of engage in FSS program services.

- Conflicts for working participants. Employed individuals who enrolled in the FSS program often had strict schedules and could not take advantage of the CBOs' services. They also did not find the services appealing. One staff member observed that those in the FSS-only group who were already working:

  > …don't see anything that we can do for them… They're not interested in obtaining their credit report. They'd rather just pay to have their taxes prepared instead of waiting downstairs for the tax preparer.… What can we offer them? A job developer? They already have a job.

- **Transportation barriers.** Some participants did not have accessible routes on public transportation to an FSS service provider, which impeded their engagement with the program.

Language barriers. Individuals with limited English skills struggled to understand the materials. One participant explained: "I told them I don't know English, to send me the papers in Spanish, but they always send me those papers in English.… [which] is like not sending me anything." A Spanish-speaking staff person acknowledged that non-English speakers have fewer opportunities. "I can send somebody to WorkForce to…[train] for medical billing, but it's in English."

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*Verma et al. (2012).

†Nuñez, Verma, and Yang (2015a).

Participation

Households in the FSS study were eligible for case management services, and they could meet with their FSS case managers on an as-needed basis. Within the overall rubric of the FSS components, the CBOs had a lot of freedom to deliver a mix of services that would move people toward self-sufficiency. The only services that CBO staff were required to provide to every client, in addition to orientation, were conducting a needs assessment and completing a career plan. Beyond that, there were no expectations for the frequency of client contact or a specified order of services that staff were expected to provide.

Four years into follow-up, about 60 percent of the participants in the FSS-only intervention had met with a CBO case manager at least once; a somewhat higher percentage (65 percent) of their FSS+incentives counterparts had done the same. However, for both groups, interactions with the CBO case managers were more frequent in the first two years than in later years. While the FSS program did reach a majority of those enrolled, nearly 40 percent of FSS-only program group members, for instance, had not interacted with a CBO case manager within 3.5 years. Only about a third of the FSS-only households had received any service (as defined by the service milestones established for the CBOs) after Year 2 of the program. These estimates do not include participants' interactions with HPD case managers, which usually focused on issues related to the housing voucher, escrow balances, and home ownership.[18] Sample members who stayed connected to the program over the long term (that is, they received FSS services in Years 3 and 4) were more likely to have been employed at the time of random assignment than were those who did not participate during Years 3 and 4. However, as noted above, longer-term participation rates for both employed and unemployed sample members were extremely low.

Despite the program's focus on work, early results showed that less than half of the respondents reported that they had received any direct work-related supports or services from the FSS program (for example, help finding a job, increasing wages or hours, or maintaining a job for specified time periods). In fact, more respondents were likely to report receiving services related to asset building than to the payment milestones. This finding can be explained partly by the needs of the clients and partly by the way HPD structured the performance-based contracts: CBOs earned milestone payments by providing help with accessing public benefits, building assets, or building human capital, needs that members of this population generally shared regardless of their work status.

[18]These estimates also capture only milestones that were successfully achieved and do not reflect the level of interaction between staff and participants that occurred to accomplish these milestones.

Longer-term data on case management milestones, covering five years of program participation, show the same pattern of FSS+incentives group members achieving more milestones. However, the increase in participants' achieving milestones between Years 4 and 5 was small since it was the last year of the program and participants were generally preparing for graduation and exiting FSS (as shown in Appendix Table A.3). These estimates do not capture households' interactions with HPD staff about the FSS escrow account or graduation, which, as noted above, occurred on a regular basis in the last year of the program.

Delivering Special Work Incentives

Incentives for work activities were offered for two years and were made every two months, starting in September 2008. Families in the FSS+incentives group were eligible to earn these reward payments. The payments were designed with the same goal of encouraging work and human capital development and were attached to work-oriented behavior: obtaining employment, moving to full-time (30 hours per week or more) employment, and completing approved basic education and vocational training in pursuit of employment.

Working with the CBOs and a financial payment organization,[19] Seedco administered the payment system, which entailed reviewing claims submitted by participants, verifying compliance with the rewards criteria, authorizing payments, and contracting with a financial institution partner to transfer payments electronically to participants' accounts. Work Rewards benefited from Seedco's engagement in Opportunity NYC–Family Rewards,[20] for which Seedco developed an elaborate coupon verification and payment processing system to pay out rewards earned for completing qualified activities. Participants claiming these rewards had to complete and submit a coupon from a coupon book specially created for the program and provide supporting documentation indicating they had met the conditions for the payment being claimed.

Families could access their incentive payments at any time after deposits were made into their bank accounts. The City's Office of Financial Empowerment worked with several banks and credit unions to develop special "Opportunity NYC" accounts that carried no fee and came with ATM cards with no overdraft risk. Work Rewards offered participants a one-time $50 bonus for opening up this special Opportunity NYC account or for using an existing account into which reward payments could be deposited electronically.

[19]GrantsPlus provided this service and made payments directly into participants' bank accounts or stored value cards.

[20]Opportunity NYC–Family Rewards, a companion study, examined a comprehensive "conditional cash transfer" program that offered cash incentives to low-income families based on children's progress in school, families' preventive health care practices, and adults' work and training efforts. GrantsPlus provided financial payment assistance, as it did for Work Rewards.

By the end of Year 2, when the incentives offer had ceased, about 40 percent of the FSS+incentives participants had earned at least one reward payment (as shown in Table 2.2). They earned an average of $2,063 in payments over the two-year period. Overall, most participants who earned cash rewards in Year 2 had also earned a reward in Year 1. Those who were already working at random assignment were most likely to have earned rewards, but about 20 percent of those who were not working at random assignment earned a reward for finding and maintaining full-time work for at least two months.

Table 2.2

Reward Payment Receipt in the FSS+Incentives Program, Core Sample

Outcome	FSS+ Incentives	Employment Status at Random Assignment: Working Full Time	Working Part Time	Not Working
Ever earned a reward (%)	39.2	67.1	41.0	23.6
Ever earned a reward for full-time work (%)	35.8	67.1	35.0	19.6
Ever earned a reward for education and training (%)	6.5	4.8	8.0	6.6
Average total amount earned[a] ($)	2,063	2,474	1,849	1,542
Sample size	523	146	100	271

SOURCE: MDRC calculations from Seedco's Work Rewards program data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

[a]Calculation is based on individuals who earned at least one reward in any category.

Conclusion

Overall, looking back at the program experiences, the performance-based contract structure with the participating CBOs may have limited case managers from maintaining the type of meaningful contact that might be necessary for supporting the self-sufficiency efforts of families who enroll in FSS. The Work Rewards baseline data show that this population had significant barriers to both employment and employment advancement. Participation data also suggest low levels of program involvement: Many participants rarely met with their case managers, and only about one-fourth reported meeting with them more than a couple of times. Unlike some of the FSS programs around the country, which require more frequent contact as a way of keeping participants engaged and focused on progress, HPD's FSS program required

only an annual check-in, leaving it up to participants to decide when and how to follow up with case managers. It is also possible that participants may not have perceived value in continued engagement, or they may have had situational issues that got in the way of participation. The field observations and interviews completed as part of the evaluation show that already employed participants had more difficulty finding time for FSS. Many viewed the services that FSS offered as unlikely to help them with their employment advancement goals. Other studies also underscore the difficulty of helping working participants advance, suggesting that FSS struggled with the same issue.

The extent to which these program practices helped participants achieve their FSS graduation goals and earn escrow is discussed in Chapter 3.

Chapter 3

Graduation Rates and Escrow Payouts

Graduating from the Family Self-Sufficiency (FSS) program, which involves attaining the goals in the Contract of Participation (COP) and any other goal stated in the Individual Training and Services Plan (ITSP), is a marker of success for FSS program participants. The program provides participants with case coordinators and referrals to supportive services to help them progress toward fulfilling their graduation requirements. When participants graduate from the program, they receive any balances that have accumulated in their escrow account while they were enrolled in the program.

The long-term escrow account is a core facet of the FSS program. It is intended to motivate families to increase earnings and build their assets. Under the Housing Choice Voucher (HCV) program, most families pay 30 percent of their monthly adjusted income, known as the *total tenant portion* (TTP) of their rent and utility expenses, to their landlords and utility providers, and the U.S. Department of Housing and Urban Development (HUD) subsidizes the remaining portion of the housing expenses. As a result, when a family's income increases, its TTP also increases. In the FSS program, when the tenant pays the increased TTP, the New York City Department of Housing Preservation and Development (HPD) credits the family's escrow account based on the increase in earned income.[1] Upon successful graduation from the FSS program — which can take up to the allotted five years for most participants — the escrow balance in the account, with accrued interest, is disbursed to the FSS participant, typically the head of household, with no restrictions on the use of the money. Under special circumstances, FSS participants can access their escrow funds — that is, receive an interim disbursement — earlier than graduation for approved purposes related to their self-sufficiency goals, such as paying off debt.

This report, which follows participants over a six-year period, focuses on FSS program graduation rates and escrow disbursements among the FSS-only and FSS+incentives groups, providing a description of the overall program payouts and looking at whether the early financial incentives for the FSS+incentives group increased graduation or escrow payouts. Since escrow credit accrual and graduation are dependent upon a participant finding employment and

[1]The amount of escrow credited to the account depends on the household's income level; those with the lowest incomes are credited the amount equal to the rental increase, and those with higher incomes are credited with a percentage of the increase, according to the FSS Program Escrow Account Credit Worksheet. See U.S. Department of Housing and Urban Development (2014).

remaining employed, graduation and escrow calculations are also presented by work status at the time of random assignment.

In brief, the following are the findings at the end of the six-year follow-up period:

- About 45 percent of the households that enrolled in FSS had graduated from the program. About 33 percent of the sample received an escrow disbursement when they graduated. Households in the FSS+incentives group received higher escrow disbursements, on average, than households in the FSS-only group.
- Graduating households in the FSS-only group received an average of about $3,800, and households that graduated in the FSS+incentives group received about $4,900 in escrow payments. Escrow disbursements covered a wide range of amounts, from the bottom quartile of disbursements, averaging less than $1,000, to the top quartile, averaging more than $15,000.
- Families in the nonworking subgroup were less likely to graduate from the FSS program than those in the working subgroup. However, the special cash incentives for work boosted FSS graduation rates for the nonworking subgroup by 13 percentage points.
- FSS graduates tended to be less disadvantaged than nongraduates in a number of important ways at the time of random assignment: They were more likely to have been employed and less likely to have been receiving TANF or Safety Net Assistance (SNA) than nongraduating households.
- A higher percentage of households in the FSS+incentives group than in the FSS-only group — especially among the nonworking subgroup — received escrow credits in the first two years of the program, when the cash incentives for maintaining full-time work were available. Escrow credit receipt evened out across the two groups later in the program.

Data Sources and Follow-Up Period

The analyses presented in this chapter draw primarily on administrative data provided by HPD, available for six years of follow-up from the time of random assignment.[2] For most participants,

[2]The graduation and escrow disbursement data from HPD are available for every household in the FSS study sample, including the control group. The 2012 report about Work Rewards (Verma et al., 2012) explained that since FSS is open to all voucher holders, control group members could enroll in the FSS (continued)

this covers five years of FSS program participation and one post-program year. Follow-up analyses in this chapter are presented in relation to the household's random assignment date, and most households' FSS contract start dates are after their random assignment date. As a result of the gap between random assignment dates and contract start dates, most households that take the full five years to graduate from the FSS program show up as graduating early in Year 6, since their contract end dates are exactly five years after their start dates but occur more than five years after their random assignment dates. The graduation outcomes in this chapter should be interpreted in this context: Most graduations that occurred in Year 5 are early graduations, although a few are participants who took the full five years to graduate. Further, most graduations that occurred in Year 6 are on-time graduations, although a few are participants who were granted contract extensions and graduated later in Year 6. The HPD data include FSS contract start and end dates, graduation dates, escrow amounts disbursed, and, for nongraduates, escrow amounts that were forfeited at the end of the household's five-year contract.[3] In addition, data collected from the Baseline Information Forms at the time of program enrollment are used to examine characteristics of graduates and nongraduates, as well as escrow disbursement patterns.

FSS Graduation and Escrow Disbursements

What It Takes to Graduate from FSS

To graduate from HPD's FSS program, an FSS household generally has five years to meet the goals it set in the COP upon program enrollment. The head of household, who is required to sign the COP, must complete all the goals and activities specified in the ITSP and be employed, and the household must be independent of cash welfare assistance — that is, no member of the family receives TANF cash assistance for at least the last 12 months before graduation. Other household members can receive services from the FSS program, and their earnings are factored into the household's escrow calculation, but program graduation is based on the head of household meeting the work and contract requirements. This means that even if another adult in the household is working at the end of the FSS contract period, any accrued

program on their own, although few did. They accessed FSS services at LaGuardia Community College — where people received services if they had enrolled in FSS before the Work Rewards demonstration began — instead of at the CBOs that served the FSS-only and FSS+incentives groups. Control group members could also take advantage of the FSS escrow offer. At the 18-month point of the program, only 4 percent of the control group had enrolled in FSS. At the end of Year 6, just under 10 percent of the control group had an escrow balance. The control group is not included in this analysis.

[3]FSS participants were considered to have received a contract extension if their contract start and end dates were more than five years apart.

escrow credits are forfeited if the head of household is not employed or has not completed his or her goals.

The goals in the ITSP were individualized for the head of household's situation and varied greatly across households. Some were general goals, such as finding and maintaining a job. Others were more specific, including paying off debts to certain banks or enrolling in particular types of training programs. HPD staff indicated in follow-up discussions that the goals in the ITSP could also be revised either as participants met their goals early or as their situations changed.

Following HUD's guidelines for FSS, households that meet all graduation requirements within five years gain access to their escrow balance. Households that do not meet the graduation requirements within five years forfeit their escrow balance, unless they are approved for a contract extension.[4] In HUD's national FSS tracking study, which tracked participants from different FSS programs across the nation who enrolled between 2005 and 2006, about one-fourth of the participants had graduated from the program within four years, with another roughly 20 percent assessed as "on track" to graduate within five years.[5]

Upon receiving an escrow payment, FSS graduates can use the money in any way they choose; there is no program restriction on how they can spend the money. In the 42-month survey, about a third of the FSS study participants interviewed reported that they planned to save any money they received from their escrow account in an emergency fund. Other commonly reported uses included basic necessities, homeownership, children's education, and their own education and training.[6] Less is known about how FSS graduates actually use their escrow once it is paid out to them. The Work Rewards study does not have a formal mechanism for collecting this information, and the households are not expected to report this information to the housing agency.

How Escrow Works

Escrow calculations can be complicated, but Figure 3.1 offers a simplified illustration of how escrow credits are accrued each month. It is a hypothetical example of an FSS house-

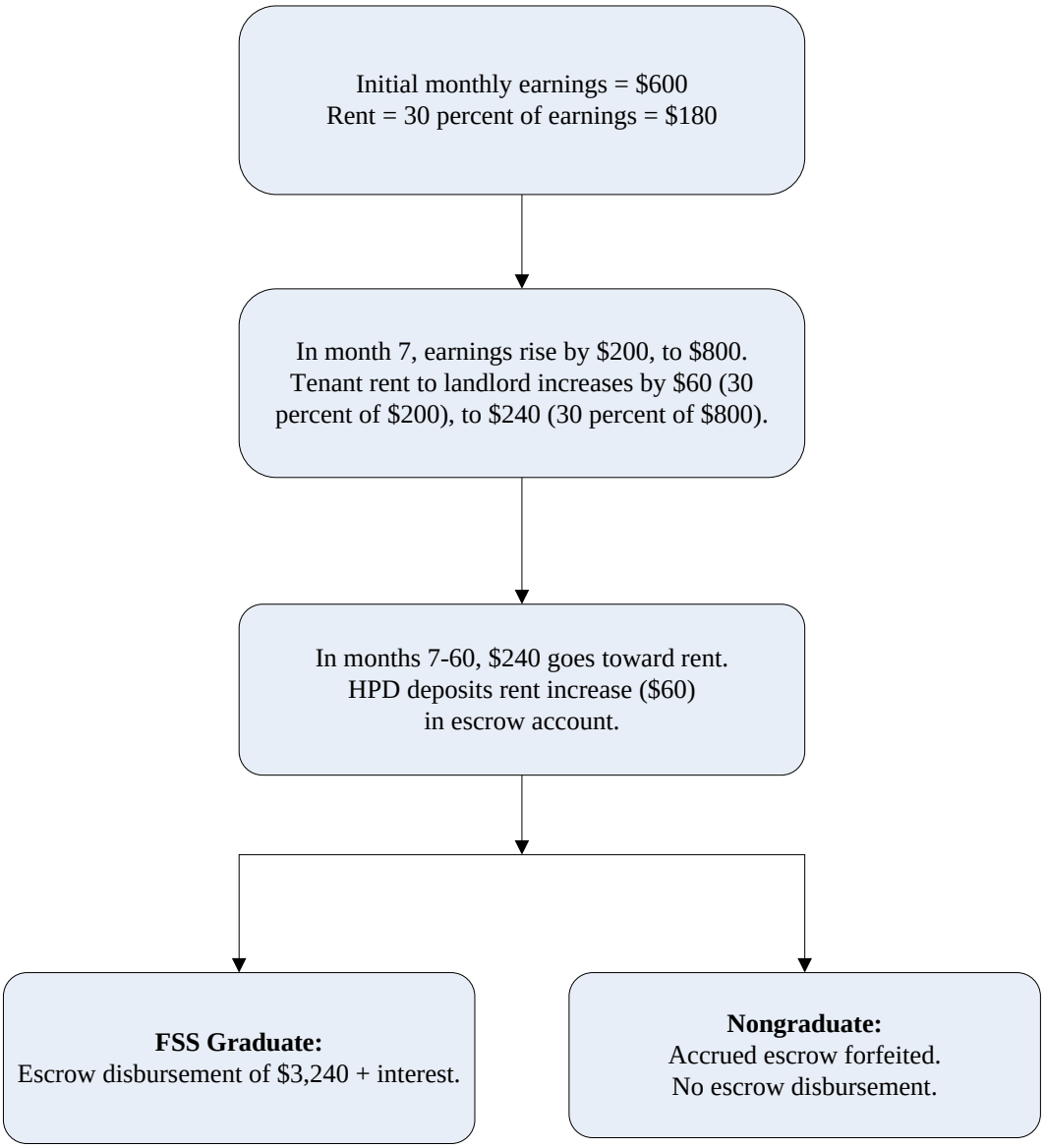
[4]Contract extensions can be granted to those who need more than five years to achieve the goals in their COP due to circumstances beyond their control. For more details, see the FSS Fact Sheet (U.S. Department of Housing and Urban Development, 2016) and the COP on the HUD website (U.S. Department of Housing and Urban Development, 2017).

[5]de Silva, Wijewardena, Wood, and Kaul (2011). Case managers who were interviewed for the study assessed whether each participant was an "excellent" or "very good" prospect for graduating from FSS.

[6]Nuñez, Verma, and Yang (2015a).

Figure 3.1

A Hypothetical Example of an FSS Participant Accruing Savings over Time Through the FSS Escrow Component



NOTE: This figure is a simplified example that assumes that the household's sole source of income is earned income, that the participant stays enrolled in FSS for a five-year period, and that the increased monthly earnings in month 7 are sustained through the end of the five-year FSS contract period. Additionally, in this example, the escrow amount credited to the household is equal to the household's rent increase. However, the escrow credit does not always correspond dollar-for-dollar with the rent increase. The amount of escrow credited to the account depends on the household's income level; those with the lowest incomes are credited the amount equal to the rental increase, and those with higher incomes are credited with a percentage of the increase.

hold whose monthly adjusted income increases from $600 at the start of the program to $800. This example assumes that utility expenses are included in the rental payment, which means that the TTP in this case is equal to rent. The household owes 30 percent of its income as TTP, so when earnings increased, its TTP increased from $180 per month (30 percent of $600) to $240 per month (30 percent of $800). The FSS household pays the increased monthly TTP amount, and HPD deposits the TTP increase of $60 per month into the household's FSS escrow account.[7] At the end of the FSS contract, assuming the head of household participating in FSS achieved the graduation requirements, the total escrow amount accrued would be paid to the household in the form of an escrow disbursement check.

Graduation Rates, Escrow Disbursements, and Escrow Forfeitures

Table 3.1 presents cumulative data on FSS escrow accumulation, graduation rates, and escrow balances among the FSS-only and FSS+incentives groups. The asterisks in the "Difference (Impact)" column indicate whether the impact of the cash incentives is statistically significant.[8] Over the six-year follow-up period, nearly 60 percent of FSS participants were credited with escrow in at least one month. About 43 percent of the FSS-only group graduated from the program. Not everyone who received escrow credits graduated; of those who did not graduate, some forfeited the credited escrow balances because they did not meet the FSS graduation requirements. Others were granted contract extensions and had not yet graduated by the end of the six-year follow-up period. Overall, the differences in graduation rates between the FSS-only and FSS+incentives groups were not statistically significant, although a larger percentage of the FSS+incentives group than the FSS-only group graduated in Year 6. The control group is not included in this analysis since they were not eligible to enroll in the FSS program run by community-based organizations (CBOs) at the time of random assignment. As noted in Chapter 2, a small proportion of them did enroll in FSS at LaGuardia Community College and accrued some escrow funds (10 percent) during the study follow-up period.

[7]The public housing agency deposits to an escrow account an amount based on one of two formulas: one for very low-income families and one for low-income families. Very low-income families are those whose annual incomes are at or below 50 percent of the median income for the area, and low-income families are those with annual incomes between 50 percent and 80 percent of the area median income. Families whose income goes above the low-income limit (above 80 percent of median) do not receive any escrow credit but may continue as participants in the FSS program through the end of their contract. (U.S. Department of Housing and Urban Development, n.d.)

[8]See Box 4.1 in Chapter 4 for more details on how to read impact tables.

Table 3.1

Six-Year Impacts on FSS Graduation and Disbursements, FSS Study, Core Sample

Outcome	FSS+ Incentives	FSS-Only	Difference (Impact)	P-Value
Graduation				
Graduated (%)	47.0	43.1	4.0	0.153
Years 1-4	2.4	4.4	-2.0 **	0.043
Year 5	12.5	11.4	1.1	0.543
Year 6	32.2	27.3	4.9 **	0.048
Graduated with no escrow savings (%)	14.4	12.5	1.9	0.322
Received a contract extension (%)	18.1	18.1	0.0	0.992
Escrow savings accounts				
Received any escrow credit (%)	56.7	58.2	-1.5	0.595
Received an interim disbursement (%)	3.8	2.5	1.3	0.190
Received an escrow disbursement (%)	32.6	30.6	2.1	0.289
Total amount disbursed ($)	2,308	1,624	684 ***	0.010
Total amount disbursed (%)				
$0	66.3	69.0	-2.7	0.289
$1 to $2,000	10.1	7.6	2.5	0.101
$2,001 to $4,000	6.9	8.9	-2.0	0.171
$4,001 to $10,000	7.1	10.4	-3.3 **	0.033
More than $10,000	9.5	4.1	5.4 ***	0.000
Total amount forfeited ($)	176	236	-60	0.354
Total amount forfeited (%)				
$0	93.0	91.8	1.2	0.401
$1 to $2,000	4.8	5.0	-0.2	0.852
$2,001 to $4,000	1.2	1.1	0.2	0.751
$4,001 to $10,000	0.5	1.8	-1.3 **	0.024
More than $10,000	0.5	0.4	0.2	0.686
Total amount disbursed, among FSS graduates ($)	*4,883*	*3,754*	--	--
Total amount disbursed, among FSS graduates (%)				
$0	*31.1*	*28.8*	--	--
$1 to $2,000	*20.4*	*17.0*	--	--
$2,001 to $4,000	*13.8*	*20.8*	--	--
$4,001 to $10,000	*14.2*	*24.1*	--	--
More than $10,000	*20.4*	*9.4*	--	--

(continued)

Table 3.1 (continued)

Outcome	FSS+ Incentives	FSS-Only	Difference (Impact)	P-Value
Total amount forfeited, among nongraduates ($)	*214*	*266*	--	--
Total amount forfeited, among nongraduates (%)				
$0	*88.5*	*87.5*	--	--
$1 to $2,000	*8.4*	*8.9*	--	--
$2,001 to $4,000	*2.4*	*1.4*	--	--
$4,001 to $10,000	*0.4*	*1.8*	--	--
More than $10,000	*0.4*	*0.4*	--	--
Sample size (total = 968)	476	492		

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive escrow disbursements.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed; therefore, there are no impacts or p-values to report.

Control group members could enroll in the FSS program after random assignment, although few did. Forty-seven control group members (less than 10 percent of the control group) had received some escrow credit by Year 6.

The majority of the graduating households — about 71 percent of the FSS-only graduates and 69 percent of the FSS+incentives graduates — received an escrow disbursement.[9] This suggests that some FSS graduates did not report any increases in household earnings since enrolling in FSS. Further analysis shows that the group of graduates who received no escrow is mixed: In addition to households that did not increase their earnings, other households in this group exited the HCV program because they exceeded the income eligibility requirements before they could earn any escrow. HPD considered those who exited the HCV program because of income increases as automatic graduations. A later section describes the group of

[9]These percentages are calculated by dividing the percentage of sample members who received an escrow disbursement by the percentage of sample members who graduated from FSS.

graduates with no escrow savings and compares them with participants who received differing amounts of escrow. In some cases, households could receive an interim disbursement of their escrow savings balance before they graduated, for expenses that could help them reach their self-sufficiency goals. Interim disbursements were rare, however, affecting less than 4 percent of the FSS participants.

Among all households, including those that received no escrow, those in the FSS+incentives group also received almost $700 more, on average, than households in the FSS-only group, a statistically significant increase. Similarly, those in the FSS+incentives group were twice as likely as those in the FSS-only group to have accrued escrow balances of more than $10,000 over five years. Among FSS graduates, households in the FSS-only group collected about $3,800 in escrow savings, on average, and those in the FSS+incentives group collected about $4,900.

If households did not graduate from the FSS program within five years and were not granted a contract extension, they forfeited any escrow savings they may have accrued. Less than 10 percent of the households in either program group forfeited escrow balances. About a fifth of each program group received a contract extension, and most of these households were still enrolled in FSS and eligible to accrue escrow savings six years after they were randomly assigned.

Graduation and Escrow by Employment Status

Recent studies of programs that serve employed individuals have found that providing work supports is more likely to move people into new jobs than to help them advance in their current jobs.[10] The 2012 Work Rewards findings also concluded that the FSS program had more to offer to nonworking adults than to working adults: The staff were better able to provide guidance to participants on finding employment than on improving their work situations once employed.[11] In addition, the escrow account serves as a larger financial benefit for unemployed individuals when they find jobs than for working individuals who either work longer hours or get a pay raise, because getting a job is more likely to trigger a higher increase in TTP than either getting a raise at a current job or switching to a higher-paying job. One key finding from the interim Work Rewards report was that the FSS+incentives intervention produced positive and sustained impacts on employment and earnings for individuals who were not working at the time of random assignment.[12] While the FSS program by itself was not enough to boost em-

[10]Hendra et al. (2010).

[11]Verma et al. (2012).

[12]Nuñez, Verma, and Yang (2015a).

ployment for the core sample or for either subgroup, the combination of FSS program offerings with shorter-term cash incentives for maintaining full-time work did, for nonworking adults.

Since individuals who were already working when they enrolled in the study were most likely better connected to the workforce, it may have been easier for them to achieve their goals for their COP and fulfill the FSS program's graduation requirements. On the other hand, the individuals who were not working had more to gain financially if they could find and maintain new jobs. This section explores similarities and differences in FSS graduation rates and escrow disbursement across subgroups defined by the employment status of the head of household at the time of random assignment. As noted earlier, although all adults in the household could generate escrow credits from finding a job or increasing their monthly earned income, FSS requires that the head of household is employed in order to graduate from the program. In the analysis that follows, the working subgroup includes households in which the head of household reported on the Baseline Information Form that he or she was currently working. The nonworking subgroup includes households in which the head of household indicated on the Baseline Information Form that he or she was not currently working.

Table 3.2 presents graduation rates and escrow disbursement amounts by each head of household's baseline employment status. Households in the working subgroup were more likely to graduate than those in the nonworking subgroup. For example, about 31 percent of the FSS-only households in the nonworking subgroup graduated from FSS, while 55 percent from the working subgroup graduated. The working subgroup also collected more escrow savings, on average, than the nonworking subgroup. Those in the FSS-only group who were working at random assignment received an average escrow disbursement of more than $2,000, while those not working at random assignment received about $1,000, on average.

The table also shows the effects of the extra cash incentives opportunity on graduation and escrow disbursement for each subgroup. The daggers in the far-right column indicate that the differences in the impacts calculated between the working and nonworking subgroups are statistically significant. The nonworking and working subgroups experienced graduation and escrow savings differently. For the nonworking subgroup, the extra cash incentives offered to the FSS+incentives group increased the graduation rate by 12 percentage points. A similar effect is reflected in escrow payment receipt, but the differences in impacts between the subgroups defined by work are not statistically significant. Over 40 percent of the FSS graduates in the nonworking subgroup did not receive an escrow disbursement. Graduates who did not receive escrow payments are discussed in more detail in the next section.

The cash incentives did not affect the graduation rates for families in which the heads of household were working at random assignment. The cash incentives did appear to reduce the

Table 3.2

Six-Year Impacts on FSS Graduation and Escrow Disbursements and Forfeitures, FSS Study, Core Sample, by Employment Status at Random Assignment

Outcome	Not Working at Random Assignment: FSS+ Incentives	FSS-Only	Difference (Impact)	P-Value	Working at Random Assignment: FSS+ Incentives	FSS-Only	Difference (Impact)	P-Value	Sig.
Graduation									
Graduated (%)	42.4	30.8	11.6 ***	0.003	51.6	55.0	-3.4	0.398	†††
Graduated with no escrow savings (%)	19.1	13.5	5.6 *	0.055	9.9	11.5	-1.6	0.524	†
Received a contract extension (%)	19.3	18.3	1.0	0.754	16.5	18.3	-1.8	0.575	
Escrow savings accounts									
Received any escrow credit (%)	47.0	42.8	4.2	0.288	66.0	73.7	-7.7 **	0.046	††
Received an interim disbursement (%)	3.6	1.3	2.4 *	0.068	3.7	3.7	0.0	0.984	
Received an escrow disbursement (%)	23.3	17.3	5.9 **	0.022	41.6	43.5	-1.8	0.639	†
Total amount disbursed ($)	1,871	1,026	844 **	0.025	2,703	2,249	454	0.230	
Total amount forfeited ($)	196	266	-70	0.464	144	214	-70	0.412	
Total amount disbursed, among FSS graduates ($)	*4,494*	*3,191*	-- --	--	*5,202*	*4,056*	-- --	--	--
Total amount disbursed, among FSS graduates (%)									
$0	*44.7*	*43.8*	-- --	--	*20.0*	*21.2*	-- --	--	--
$1 to $2,000	*16.5*	*9.6*	-- --	--	*24.2*	*21.2*	-- --	--	--
$2,001 to $4,000	*11.7*	*19.2*	-- --	--	*15.8*	*21.2*	-- --	--	--
$4,001 to $10,000	*8.7*	*19.2*	-- --	--	*17.5*	*26.3*	-- --	--	--
More than $10,000	*18.5*	*8.2*	-- --	--	*22.5*	*10.2*	-- --	--	--
Total amount forfeited, among nongraduates ($)	*310*	*322*	-- --	--	*98*	*190*	-- --	--	--
Total amount forfeited, among nongraduates (%)									
$0	*89.1*	*89.6*	-- --	--	*87.5*	*84.2*	-- --	--	--
$1 to $2,000	*5.8*	*5.5*	-- --	--	*11.6*	*14.0*	-- --	--	--
$2,001 to $4,000	*3.6*	*2.4*	-- --	--	*0.9*	*0.0*	-- --	--	--
$4,001 to $10,000	*0.7*	*1.8*	-- --	--	*0.0*	*1.8*	-- --	--	--
More than $10,000	*0.7*	*0.6*	-- --	--	*0.0*	*0.0*	-- --	--	--
Sample size (total = 961)	241	237			232	251			

(continued)

Table 3.2 (continued)

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals. The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment chaacteristics. A two-tailed t-test was applied to the differences between program outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Italic type indicates comparisons that are nonexperimental. Statistical tests were not performed; therefore, there are no impacts or p-values to report.

Control group members could enroll in the FSS program after random assignment, although few did. Forty-seven control group members (less than 10 percent of the control group) had received some escrow credit by Year 6.

percentage of households that accumulated any escrow, perhaps because increasing their wages or hours of work is more challenging than finding a job. Across the nonworking subgroup, about a fifth of the FSS+incentives households did not receive an escrow disbursement, compared with 14 percent of the FSS-only households.

The bottom of Table 3.2 shows escrow savings disbursements among program graduates and forfeitures among nongraduates. Among program graduates, more escrow savings were disbursed to those in the FSS+incentives group than those in the FSS-only group, and among nongraduates, FSS+incentives households forfeited less money across both subgroups. (Since these measures are nonexperimental, meaning they do not include both graduates and nongraduates, the difference across program groups cannot be solely attributed to the difference in the intervention.) Among those who did not graduate from the FSS program and forfeited their escrow savings accounts, average forfeiture amounts were about the same across the employment subgroups.

Who Graduated? Who Didn't?

Voucher holders enrolling in FSS have up to five years, with the possible extension of another two years, to meet their graduation requirements. Since graduating from the program with an escrow payment requires higher earnings and no dependency on cash assistance, it is likely that some households had an easier time reaching those requirements than others. For example, households receiving TANF/SNA at the time of random assignment needed to be off public assistance by 12 months before graduation, so meeting this graduation requirement may

have been more difficult for these households than for households that were not receiving cash assistance. Table 3.3 compares baseline characteristics and Year 6 outcomes of households for graduates and nongraduates.

This analysis pools both program groups to look at characteristics of graduates and nongraduates. As expected, and similar to the findings in HUD's FSS tracking study,[13] FSS graduates generally enrolled in the program with fewer disadvantages than nongraduates. First, the heads of households were much more likely to have been employed; less than half of them from nongraduating households were employed at the time of random assignment, compared with about 60 percent from graduating households. Graduates were also less likely to have been receiving TANF/SNA at the time of random assignment. Their rates of receiving other public benefits such as food stamps or public health insurance were similar to those of nongraduates. Age and household composition also looked similar across graduates and nongraduates, which is consistent with the tracked sample in HUD's prospective study. In addition, over six years of follow-up, graduates received substantially more household income from escrow disbursements and earnings, and much less from TANF/SNA and food stamp payments, than did nongraduates. They also received higher subsidy amounts than did nongraduates, possibly reflecting their inability to pay relatively higher rents than FSS households that did not graduate.

In addition, over six years of follow-up, graduates received substantially more household income from escrow disbursements and earnings, and much less from TANF/SNA and food stamp payments, than non-graduates. They also received higher subsidy amounts than non-graduates, possibly reflecting higher compliance with HCV rules and the ability to pay relatively higher rents than FSS households that did not graduate.

What Differentiates Groups of Graduates with Different Escrow Amounts?

Table 3.1 showed that about 30 percent of FSS graduates did not receive any escrow disbursement upon graduation. Among graduates who did receive escrow, the amounts ranged widely, from as low as $21 to more than $50,000. To understand differences between graduates who accumulated different amounts of escrow between program enrollment and graduation, Table 3.4 presents baseline characteristics, early outcomes, and late to post-program outcomes for the following: graduates with no escrow (who make up 14 percent of the sample), graduates in the bottom quartile of disbursements (who make up 8 percent of the sample and received between $21 and $1,906), those in the middle 50 percent of disbursements (16 percent of the

[13] de Silva, Wijewardena, Wood, and Kaul (2011).

Table 3.3

Characteristics for Households in FSS, by FSS Graduation Status

Characteristic	Graduated from FSS	Did Not Graduate	
At baseline			
Age of head of household	42	43	
Number of adults in household	1.4	1.5	
More than one adult in household (%)	33.2	35.9	
Number of children in household	1.4	1.3	
Head of household has high school diploma or GED certificate (%)	63.5	59.5	
Head of household is currently working (%)	59.4	42.8	***
Other adult in household is currently working (%)	3.5	3.8	
Receiving TANF/SNA (%)	13.3	20.6	***
Receiving food stamps (SNAP) (%)	63.5	69.3	*
On Section 8 for less than 7 years (%)	58.9	56.9	
At Year 6			
Escrow disbursement or forfeiture amount ($)	4,335	241	***
Earnings, Years 1-6 ($)	77,844	33,433	***
TANF amount received, Years 1-6 ($)	5,187	9,801	***
Food stamp amount received, Years 1-6 ($)	17,074	19,137	**
Housing subsidy amount received, Years 1-6 ($)	66,566	62,510	*
Sample size (total = 968)	437	531	

SOURCE: MDRC calculations using Work Rewards Baseline Information Forms data, wage records from the New York State Department of Labor (NYSDOL), public assistance data from New York City's Human Resources Administration (HRA), and housing records from the New York City Department of Housing Preservation and Development (HPD) Section 8 records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The data cover unemployment insurance (UI), public assistance, and housing records through June 30, 2015, and for 6 years after study entry for each sample member.

A two-tailed t-test was applied to the differences between program group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

GED is General Educational Development. TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

Table 3.4

Characteristics and Outcomes of FSS Participants, by Escrow Disbursement Quartiles

Characteristic / Outcome	Did Not Graduate	Graduated with $0 Escrow	Bottom Quartile of Disbursements ($.01-$1,906.30)	2nd-3rd Quartile of Disbursements ($1,906.31-$8,214.41)	Top Quartile of Disbursements (>$8,214.41)
Average escrow amount disbursed, Years 1-6 ($)	41	0	996	4,283	15,299
Head of household employed at baseline (%)	42.8	40.5	71.4	67.8	63.2
Adult other than head of household employed at baseline (%)	3.8	2.3	2.6	4.6	4.0
Household received TANF/SNA at baseline (%)	20.6	21.7	10.5	8.0	12.2
At least one adult employed, according to UI records (%)					
Year 1	52.4	57.3	75.3	81.1	84.2
Year 5	41.8	41.2	79.2	79.1	90.8
Year 6	42.6	47.3	83.1	79.1	88.2
Household earnings, according to UI records ($)					
Year 1	5,563	7,322	9,444	11,501	14,189
Year 5	5,470	8,363	11,517	15,773	24,218
Year 6	6,059	9,163	13,786	16,151	25,145
Housing subsidy ($)					
Year 1	9,707	9,747	9,806	10,790	10,925
Year 5	9,755	11,143	11,348	10,692	8,955
Year 6	9,403	10,851	10,709	10,614	8,295
Average quarterly TANF/SNA receipt (%)					
Year 1	36.6	38.0	17.5	14.4	14.8
Year 5	28.1	27.5	8.1	7.2	6.6
Year 6	26.8	28.1	9.1	9.0	9.2
Amount of TANF/SNA received ($)					
Year 1	1,766	1,997	721	621	672
Year 5	1,641	1,521	204	348	322
Year 6	1,510	1,550	476	447	626
Sample size	528	131	77	149	76
Percentage of sample	54.9	13.6	8.0	15.5	7.9

(continued)

Table 3.4 (continued)

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records, Work Rewards Baseline Information Form data, New York State unemployment insurance (UI) wage records, and the New York City Human Resources Administration (HRA) public assistance records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals. The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Control group members could enroll in the FSS program after random assignment, although few did. Forty-seven control group members (less than 10 percent of the control group) had received some escrow credit by Year 6.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. UI is unemployment insurance.

sample, received between $1,906 and $8,214), and those in the top quartile of disbursements (8 percent of the sample, received between $8,214 and $54,633). Nongraduates (55 percent of the sample) are shown in this table as a reference point.

Before discussing the findings shown in Table 3.4, it is important to explain a few points about the data. First, conversations with HPD staff revealed that participants who "earned out" of the HCV program were considered program graduates, so these participants were coded as having graduated from FSS regardless of whether they had an escrow forfeiture. This was the only circumstance in which participants who forfeited escrow were considered program graduates. Second, someone who graduated must have been off of public assistance for 12 months prior to graduation, but someone in his or her household could have begun receiving TANF or SNAP after the FSS participant graduated. Therefore, it is uncommon, but not unusual or unexpected, for a participant who graduated to also show up as having received public assistance in the same program year.

The table shows two unexpected patterns. First, the outcomes in Years 5 and 6 for those who graduated with no escrow disbursement are more similar to the outcomes for nongraduates than to the outcomes for graduates with some escrow. Given the graduation requirement of being off of public assistance for 12 months prior to graduation, it is unexpected that the rates of TANF receipt in Years 5 and 6 for this group were about equal to those of nongraduates (a quarterly receipt rate of about 25 percent), while other graduates had much lower TANF receipt rates. As mentioned earlier, graduates who earned no escrow consisted of those whose house-

holds experienced no earnings increases during their time in FSS, as well those who were considered graduates because their households exited the HCV program when they exceeded income limits. Households that experienced no earnings increases may have graduated earlier, on average, because they met all graduation requirements but had low work prospects; HPD granted contract extensions only to participants whose families would have benefited substantially from the additional time. Households that exceeded the income limits for the HCV program were considered automatic graduations regardless of whether the requirements for accessing their escrow disbursements were met. Among this group, household earnings in Years 5 and 6 were about 50 percent higher than the earnings of nongraduates ($9,000, compared with $6,000 for nongraduates), but they were still substantially lower than those of FSS graduates who had escrow disbursements.

Second, the households in the top quartile of escrow disbursements had substantially better employment and earnings outcomes in Years 5 and 6 than the other groups shown in Table 3.4, even though their employment rates at the time of random assignment were similar to those of other FSS graduates who received escrow credit. For households in the top quartile of disbursements, household earnings nearly doubled between Year 1 and Year 6, from $14,000 in Year 1 to over $25,000 in Year 6, while housing subsidies fell, partially as a result of the increased earnings over time. The other FSS graduates also experienced earnings increases that were, on average, larger than the earnings experienced by nongraduates, but not nearly as pronounced as for those with the largest escrow disbursements. Their housing subsidy amounts, compared with those of the top quartile, also stayed relatively constant.

As expected, quarterly TANF receipt rates dropped to less than 10 percent in Years 5 and 6 for graduates who received any escrow.

Graduation and Escrow Credit Receipt over Time

In HUD's prospective study, about one-fourth of the tracked FSS participants had graduated four years after enrolling in FSS, and most of these graduations occurred in Years 3 and 4.[14] The earlier analysis presented in Table 3.1 shows that for the FSS study, graduation generally occurred later than it did for the participants in HUD's study, in Years 5 and 6. This analysis examines whether the FSS+incentives and FSS-only groups experienced graduation or escrow components of the program differently over time. Looking at escrow credits by month can inform how easy or difficult it was for FSS program participants to find work or improve their employment circumstances. It also provides context for the effects of the cash incentives on graduation and escrow payments, since these incentives were only available during the first two years of the program.

[14]de Silva, Wijewardena, Wood, and Kaul (2011).

Figure 3.2 presents escrow credit receipt for each month for sample members in the FSS-only and FSS+incentives groups in Years 2 through 6.[15] The line graph reveals that the general trend of escrow credit receipt is similar for both program groups. The proportion of sample members who received an escrow credit grew substantially each month between Years 1 and 3, peaking at just over 50 percent in Year 3. About half of the households in the program continued to receive escrow credits until Year 4, when the percentages began to fall as households left the program and either graduated and collected their escrow balances or forfeited their balances without graduating. In other words, from enrollment to the end of Year 4, earned income had increased for at least one adult (either by finding a new job or earning more at a current job) in 50 percent of the households that were enrolled in the FSS program.

When looking at the program groups separately, the escrow credit receipt rates were higher for the FSS+incentives group than for the FSS-only group between Years 1 and 2, when the financial cash incentives were available to the FSS+incentives group. After that, consistent differences in credit receipt between the two program groups did not persist. This suggests that since the FSS+incentives group received a higher amount of escrow savings than the FSS-only group (as shown in Table 3.1), the early boost that the FSS+incentives program gave to employment activity paid out substantially at the end of the program, even though escrow credit receipt for the two groups did not look different in the program's final year.

Figure 3.3 shows monthly escrow credit receipt in Years 2 through 6 by employment status at the time of random assignment for each of the program groups. The line graph demonstrates that for both the FSS+incentives and FSS-only groups, larger proportions of the working subgroups than the nonworking subgroups were consistently receiving escrow credit. Among all households in the nonworking subgroup, those in the FSS+incentives group were earning escrow credits at higher rates than the FSS-only group through Year 2 of the program, as well as during Year 4. Families with heads of households who were not employed when they enrolled in the FSS program had the most to gain from the escrow savings account if they were able to find a new job shortly after enrollment, and those in the FSS+incentives group had cash incentives that provided more motivation for them to do so.

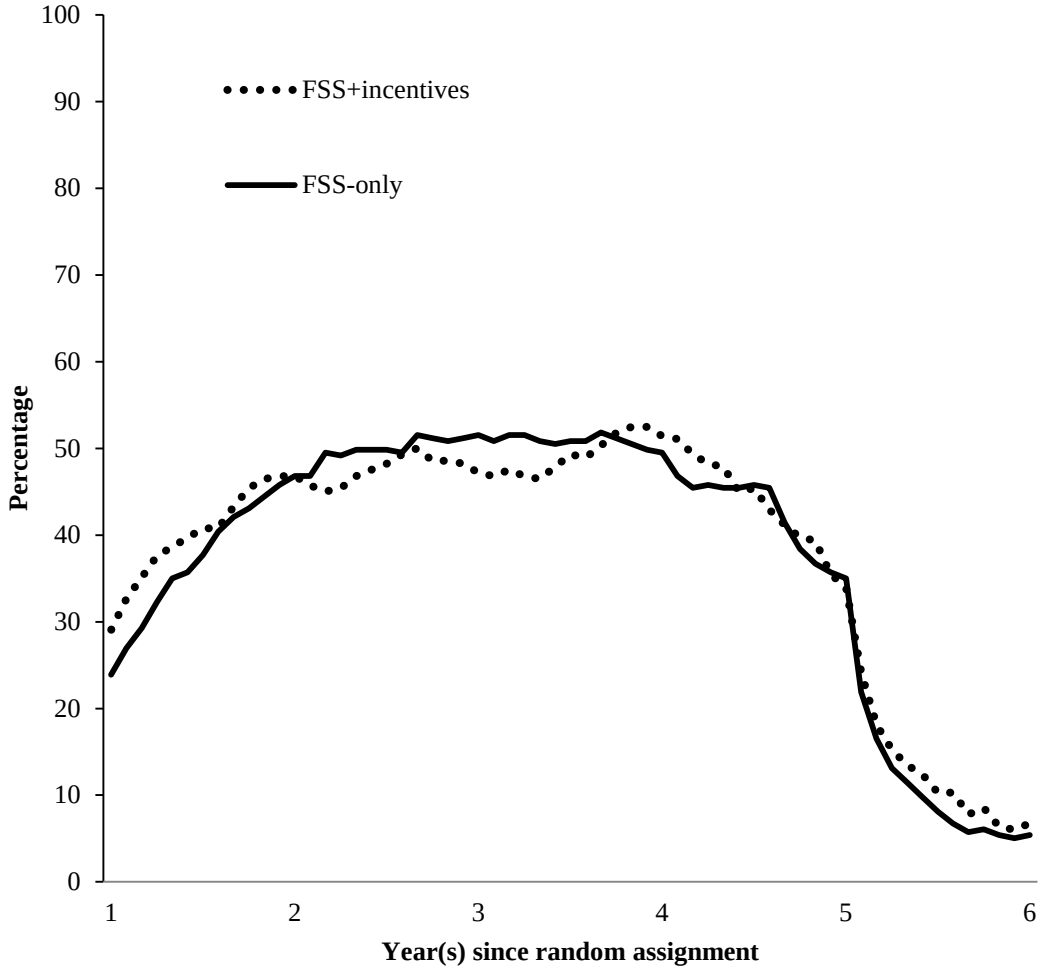
Putting the Graduation and Escrow Findings in the National Context

Although a direct comparison of the Work Rewards FSS participants with HUD's prospective study sample of FSS enrollees is not precise, it is useful to discuss the graduation and

[15]Escrow accrual data trends for the first few months of FSS participation showed a lot of noise due to discrepancies between random assignment dates and FSS enrollment dates, so Year 1 monthly accrual trends are not shown in Figures 3.2 and 3.3.

Figure 3.2

Percentage of Households Receiving Escrow Credit, by Time Since Random Assignment, FSS Study, Core Sample

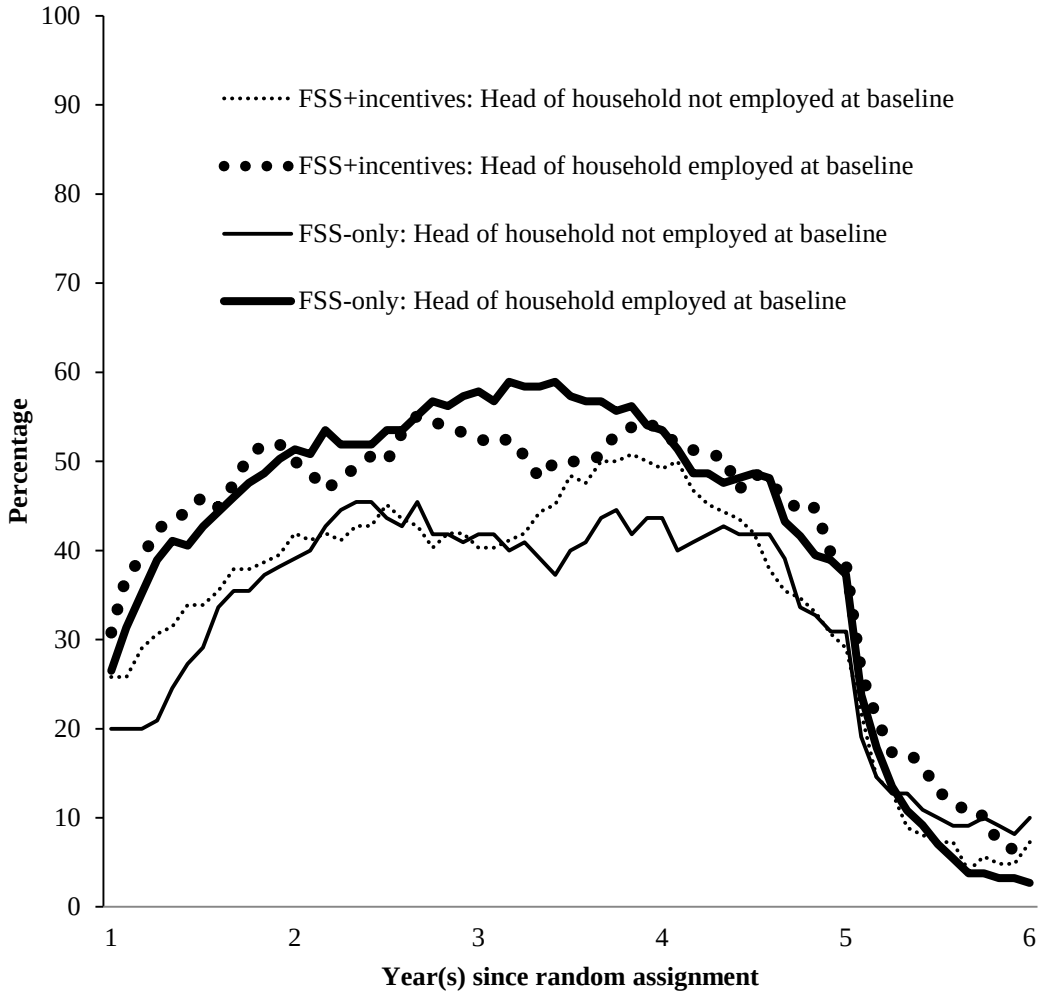


SOURCE: MDRC calculations using administrative records data from the New York City Department of Housing Preservation and Development (HPD).

NOTE: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Figure 3.3

Percentage of Households Receiving Escrow Credit, by Time Since Random Assignment and Employment Status at Baseline



SOURCE: MDRC calculations using administrative records data from the New York City Department of Housing Preservation and Development (HPD).

NOTE: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

escrow findings in the context of that study. As mentioned earlier in the chapter, the FSS participants in the study sample had graduation outcomes that tracked closely with those in HUD's study, with about 45 percent of the participants in HUD's study graduating or "on track" to graduate within five years. Lining up these outcomes might lead to the conclusion that HPD's FSS program performed similarly to other programs nationally. The FSS sample members in this study, however, are different from participants in most other FSS programs in the nation profiled in HUD's prospective study sample.[16] When the study began, the recruitment effort was intense and targeted all HCV holders meeting the income eligibility requirement without screening for their skill level or motivation to work, which HUD rules allow. As a result, the FSS study sample — even after excluding elderly or disabled participants from the core sample — appears to have had larger proportions of people who might have difficulty finding or maintaining work. Table 3.5 demonstrates this by presenting baseline characteristics of FSS participants in HUD's tracking study and in the Work Rewards FSS study. Although not a perfect comparison (HUD's tracked FSS participant sample is much smaller than HPD's FSS participant sample), the HUD study participants are from a national sample, and the differences between the study samples suggest that the HPD participants had more challenges to overcome in order to graduate than was the case for participants in other FSS programs around the country.

For example, the FSS participants at HPD were older, on average, than the participants in the HUD study (even after excluding elderly participants from the FSS core sample). Less than half of the FSS study's core sample of adults was working at the time of random assignment, and only 30 percent were working full time. About 60 percent had at least a high school diploma or General Educational Development (GED) credential. Among the tracked participants in HUD's study, about 70 percent were employed at program enrollment, and three-fourths had at least a high school diploma or GED credential. In addition, larger proportions of the FSS study sample were receiving public benefits when they enrolled in the study. Since the FSS study enrolled adults with less work and education experience who were in households that were receiving public benefits at a higher rate, the graduation rates from HPD's FSS program are generally encouraging.

[16]This sample is not the same sample as the one in the national FSS study that HUD commissioned in 2012. Background characteristics of the study participants in the national FSS evaluation map much closer to the Work Rewards FSS study core sample members. However, HUD's prospective study sample is the appropriate comparison for this analysis, since it is the only national FSS study to date that has more than three years of FSS participation data covering program graduation and escrow balance accumulation.

Table 3.5

FSS Participant Baseline Characteristics Across Studies

Characteristic	HUD Prospective Study	Work Rewards FSS Study
Adult baseline characteristics		
Age	34	40
Not employed (%)	30	51
Working full time (%)	44	30
Education (highest degree or diploma earned) (%)		
GED certificate or high school diploma	42	26
Some college	27	27
4-year college or beyond	6	7
Sample size	181	1,069
Household baseline characteristics		
Receiving food stamps/SNAP (%)	48	70
Receiving Medicaid (%)	40	77
Receiving Temporary Assistance for Needy Families (TANF) (%)	24	17
Sample size	181	968

SOURCES: de Silva, Wijewardena, Wood, and Kaul (2011), and MDRC calculations using Work Rewards Baseline Information Forms data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

HUD is U.S. Department of Housing and Urban Development. GED is General Educational Development. SNAP is Supplemental Nutrition Assistance Program.

Conclusion

In summary, about 40 percent of all FSS households graduated from the FSS program within six years and collected over $4,000 per household. This amounts to more than $2 million in escrow payments disbursed to less than half of all FSS participants. Those in the FSS+incentives group received higher escrow disbursements than those in the FSS-only group.

The additional cash incentives for full-time work increased graduation rates primarily for families in which the head of household was not working at the time of random assignment. The added motivation of reward payments early in the program appears to have resulted in larger escrow gains for the sample, especially for those who were not employed when they enrolled in the study.

The FSS program transferred large amounts of money in escrow disbursements to households that reached their self-sufficiency goals — a clear financial benefit, especially for those families who were in the top quartile of escrow disbursements. For these families, the average disbursement was equal to the average amount of earned income from a job in the first year of the program; essentially, the families in the top quartile received an escrow disbursement that was equal to a year's pay from their jobs in Year 1.

However, the families in the top quartile of disbursements accounted for just 8 percent of the FSS participants. More typical graduates experienced more modest earnings gains and smaller — yet still quite substantial — disbursement amounts. For families whose disbursements were in the 25th through 75th percentiles, their disbursement averaged about a third of their household earnings in Year 1.

Although data on the use of the escrow disbursements after graduation are not available, the interim report presented survey respondents' plans for their use. About a third of the respondents indicated that they would save the money as an emergency fund. Other top reasons, each reported by about one-fourth of the respondents, were saving for children's future educational expenses, paying for basic necessities, and buying a house.[17]

Most FSS participants had not received any escrow disbursements at the end of the six-year follow-up period, for a number of reasons: They graduated without experiencing any increases in earnings, they forfeited their escrow savings when they did not meet all the graduation requirements, or they received a contract extension and were still active participants in FSS at the end of Year 6. The findings show that those who were working at the time of random assignment — presumably these are the people who were more consistently employed — were also more likely to regularly earn escrow credits, regardless of whether they were eligible for cash incentives for full-time work.

The challenge for FSS programs nationwide is to make the escrow component work for those who find it difficult to work consistently. The households in the nonworking subgroup appeared to have accrued escrow credits at higher rates earlier in the program but were less likely to graduate from FSS than those in the working subgroup. Providing cash incentives in

[17]Nuñez, Verma, and Yang (2015a).

the form of more immediate returns for full-time work seems like a promising strategy: It helped the households in the nonworking subgroup find employment early in the program, and extending the incentives beyond 24 months might have helped these households maintain employment and stay off of public assistance for longer, as well as receive more in escrow credits.

Another possibility might be to target more case management to these households more consistently throughout the program — especially during Years 3 and 4, when remaining employed in the absence of cash incentives would have reaped large escrow benefits and put participants on a more likely course for graduation. In addition, case managers at the CBOs were not as well versed as HPD staff on the details of how escrow credits were calculated, so the escrow and service components of the program were probably not as well integrated as they should have been. For participants who needed more intense support and help with finding and maintaining employment, meeting more regularly with knowledgeable case managers in Years 3 and 4 may have been especially useful in helping them reach the program's graduation requirements. In Year 4, HPD did institute check-ins for all participants so that they could review their escrow credits and ITSP goals, but households with employment challenges may have benefited from earlier and more frequent meetings.

Putting more low-income families within reach of accumulating escrow savings may translate to large enough earnings impacts to produce other benefits to society, through reductions in public assistance as well as housing subsidies. Chapters 4 and 5 investigate program impacts on six-year employment, benefit receipt, and housing subsidy rates to see whether FSS graduation and escrow disbursements among FSS participants translated into program effects on other measures of self-sufficiency in the final years of the program.

Chapter 4

Impacts of FSS-Only and FSS+Incentives on Employment and Earnings

Though program graduation is an important marker of success in the Family Self-Sufficiency (FSS) program, the graduation rate itself does not speak to the *impact* of the program — that is, whether its participants experienced improved employment, education, and other outcomes relative to nonparticipants. This chapter summarizes the impacts — or effects — of the FSS program alone and FSS plus the special cash work incentives on employment and earnings through the full six years of follow-up. In doing so, it builds upon analyses presented in the previous reports, which tracked the same outcomes over a four-year program period. It also draws on findings from the 42-month survey, the results of which were described in the interim report.[1] The survey included measures of educational attainment, training, and certification, which provide important context for the earnings and employment outcomes presented in this chapter. The six-year period examined here represents, for most program participants, the full length of their time in FSS plus one year of post-program follow-up.[2] Therefore, this chapter updates findings and reports on the stability of the interim impact findings after the interventions had ended. In presenting these longer-term findings, the chapter also contains a brief review of selected interim findings to provide important context.

In summary, the findings indicate the following:

- Neither the FSS-only nor the FSS+incentives program produced impacts on employment or earnings covered by unemployment insurance (UI) for the full follow-up period. This finding is consistent with interim findings; new impacts did not emerge over the longer-term follow-up period, as families approached graduation from the program.

- Also consistent with previous results, the FSS+incentives intervention produced statistically significant impacts on UI employment and earnings over the full follow-up period for those who were not working during random assignment. However, the impacts are not present during the sixth year of follow-up, suggesting that they may have begun to fade or the control group may have begun to catch up.

[1] Nuñez, Verma, and Yang (2015a, b).

[2] Although extensions are possible, FSS was conceived as a five-year intervention.

Data and Methods

Program impacts on employment and earnings in the Work Rewards study were estimated using administrative records and survey responses. Education and training outcomes, which were detailed in the Work Rewards interim report and are reviewed briefly below, were constructed from survey responses. Earnings records come from the New York State UI system. The UI data, available for every adult in the study, provide quarterly earnings for the majority of workers in the state and are available for the evaluation sample for several quarters before study entry and for six years of follow-up (or 24 quarters after study entry). The UI records cover earnings from most jobs in a given state; they do not cover earnings from self-employment, jobs with the federal government or the military, informal jobs, and out-of-state jobs. They also do not provide important job characteristics data (such as hours worked or hourly wage rates).[3] For this reason, the evaluation included a survey, which was the source of job characteristics data for the study sample. Program impacts on employment and earnings were estimated for both the core and the full samples. The report presents core sample impacts. Estimated impacts for the full sample are not shown in this report but are similar to the core sample estimates.

Interpreting Impacts

Because individuals in the FSS study were assigned at random to either one of two program groups (FSS-only or FSS+incentives) or to a control group, program impacts can be calculated as the difference in outcomes between the research groups. (See Box 4.1 for an explanation of how to read the impact tables in this report.) The effects of the FSS program combined with incentive payments (or "reward payments"), for example, are calculated as differences in post-random assignment outcomes between the FSS+incentives group and the control group. Differences in outcomes between the FSS-only and control groups provide estimates of the effect of the offer of FSS by itself. Finally, differences between the two program groups, FSS+incentives and FSS-only, provide an estimate of the effect of adding the incentive payments to the FSS program. A difference between the program and control groups is referred to as statistically significant if it has less than a 10 percent probability of arising by chance. In that case, the difference is called an impact and is thought to have been caused by the program. Every impact estimate also has a margin of error, which is referred to as the confidence interval. The confidence interval provides information on the reliability of an estimate, and more uncertain estimates will have larger confidence intervals. In addition, if a given impact estimate

[3]Other research by Abraham, Haltiwanger, Sandusky, and Spletzer (2009) suggests that the UI data may miss relatively more employment for low-income populations than for higher-income groups, given the former group's greater prevalence of work in informal jobs.

Box 4.1

How to Read the Impact Tables in This Report

In the context of this evaluation, an "impact" is a measure of how much the two Work Rewards interventions discussed in this report — FSS-only and FSS+incentives — changed outcomes for program participants. The group outcomes for the interventions are compared with each other and with their respective control groups. The top row of the excerpted table below, for example, shows that the FSS-only group had a quarterly employment rate of 47 percent in Year 1, compared with 43 percent for the control group.

Because participants were assigned randomly to either the program group or the control group, the effects of the program can be estimated by the difference in outcomes between those two research groups. The "Difference" column in the table excerpt shows the differences between the two research groups' outcomes — that is, the program's estimated impacts on the outcomes. For example, the estimated program impact of the FSS-only program on the quarterly employment rate in Year 1 of the study can be calculated by subtracting 43 percent from 47 percent, yielding an increase, or estimated impact, of 4 percentage points (rounded up from 3.9, as shown in the table).

Observed differences between research groups are tested under the assumption that there is no true difference between the two numbers. In other words, observed differences are tested against the possibility that the true outcome difference between these populations is zero. The p-value shows the probability that the observed difference, or impact, arose by chance and is not indicative of a true population-level difference. In the table excerpt below, the difference between the program and control groups in Year 1 has a 3.8 percent probability of arising as a result of chance (when the true difference is zero) rather than as a result of the FSS-only program. In contrast, the difference on the measure of quarterly employment in Year 2 has a 25.1 percent probability of having arisen by chance. For this evaluation, only differences that have a 10 percent probability or less of arising by chance are considered "statistically significant." Assigning statistical significance to a finding means rejecting the possibility that the true difference is zero. Differences that are not statistically significant are not necessarily indicative of zero impact, but this cannot be ruled out. Estimated differences reported in tables represent the middle point of a range of possible differences between the research groups. A statistically significant difference (an impact) means that zero is not included in that range; if a finding is not statistically significant, zero is included in that range. The number of asterisks indicates whether the impact is statistically significant at the 1 percent (***), 5 percent (**), or 10 percent (*) level, meaning that there is only a 1, 5, or 10 percent probability, respectively, that the impact arose by chance.

Impacts on Employment, FSS Study Sample

Outcome	FSS-Only Group	Control Group	Difference (Impact)	P-Value
Quarterly employment rate (%)				
Year 1	47.1	43.1	3.9**	0.038
Year 2	45.5	43.1	2.5	0.251

is not statistically significant at a 10 percent level, meaning that one cannot reject the hypothesis that value of zero. The effects of the program are presented in the main report only for the FSS core sample, which excludes elderly and disabled individuals and members of the Hasidic community.[4] Interim effects for the full sample, which includes such individuals, were presented in a technical supplement to the interim report.[5] Findings for the full sample after the entire follow-up period are very similar to those for the core sample presented in this chapter and are not included here.

Adults other than the head of household/voucher holder who chose not to enroll in the study were eligible to receive services from FSS staff, although the extent to which they did so is not known. Impacts on employment and earnings are estimated at the individual level for all adults who enrolled in the study, representing 81 percent of all adults in participating households. Any effects of these services on employment and earnings for other adults in the household are not captured in these data. However, impacts on benefits receipt — such as through housing vouchers; the Supplemental Nutrition Assistance Program (SNAP), or food stamps; and Temporary Assistance for Needy Families (TANF) — are estimated at the household level and thus may indirectly capture effects of services on other adults in the household.

The tables and figures in this chapter present outcome levels for both core study groups and core subgroups (for example, those who were not employed at random assignment) within study groups. Differences across study groups that are statistically significant (indicated by asterisks in the tables) are considered program impacts, or, in other words, differences that are highly likely to have been caused by the program rather than by chance. The key focus of subgroup analysis is not on the impacts for a given subgroup, but whether the *differences in impacts across subgroups* are statistically significant. (Subgroup differences that are statistically significant are noted with daggers in the tables.) The sample size for each subgroup is fairly small, meaning that differences between groups are less likely to be statistically significant.

Review of Interim Findings

While this report focuses on the programs' longer-term impacts on employment and earnings, it is helpful to briefly review some key findings from the interim report, particularly those that are useful for interpreting program effects on employment and earnings. As noted, the Work Rewards study included a follow-up survey, which was administered to participants roughly 42

[4]The full sample also included a small number of Hasidic Jews, representing the idiosyncrasies of the study setting, New York City. Because it would be difficult to generalize from the experiences of this group to the larger, national population of housing voucher recipients, these individuals, too, are excluded from the core evaluation sample.

[5]The technical supplement is available at www.mdrc.org; see Nuñez, Verma, and Yang (2015b).

months after random assignment and contained questions to measure the impact of the FSS-only and FSS+ incentives programs on participation in and completion of education and training. The interim report also describes receipt of incentive payments among FSS+incentives participants. Together these findings provide context to interpret the impact findings presented below.

Effects on Education and Training

The FSS programs, it was hoped, would not only promote movement into the workforce but would help participants advance to more stable, more remunerative employment. Case managers could help by removing barriers to (better) employment (for example, transportation or child care issues) and by helping participants identify and enroll in education and training programs that could open up new employment options. The 42-month survey included questions on participation in education and training programs as well as receipt of diplomas, degrees, licenses, and certifications to investigate this latter pathway.

Table 4.1 summarizes impacts on education and training captured by the 42-month survey. Almost half of the control group members participated in some form of education or training since random assignment, compared with 55.7 percent of the FSS-only and 58.6 percent of the FSS+incentives groups, reflecting, perhaps, the services available in the New York City area. Both FSS programs produced positive impacts on participation in education or training activities (Adult Basic Education, or ABE; General Educational Development, or GED; or high school classes). The rates for the two program groups are not significantly different from each other, suggesting that both programs were equally effective in moving people into these types of courses.

Increased enrollment in education and training courses did not, however, appear to have led to increases in licensing, certification, or degrees. Case managers could refer program participants to education programs and help them enroll, but completing a course can be difficult, especially when a student is working and faced with other barriers or material hardship. The lack of impact on education and training might help explain the limited program impacts on other outcomes, such as employment and earnings, described below. Observed gains in earnings and employment must have originated through other pathways — for example, through the direct effect of the incentive payments rather than through educational attainment.

Receipt of Incentive Payments

Chapter 2 describes the special work incentives offered to those randomly assigned to the FSS+incentives group and presents receipt rates for the group overall and for those not working at random assignment. Because incentive payment receipt offers important context for

Table 4.1

Impacts on Education and Training, FSS Study, 42-Month Survey

Outcome (%)	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value
All respondents							
Ever participated in an education or training activity	55.7	58.6	49.1	6.6 *	0.064	9.5 ***	0.008
Has any degree, license, or certificate	81.2	80.3	78.1	3.1	0.211	2.1	0.387
Sample size (total = 1,152)	385	386	381				
Not working at random assignment							
Ever participated in an education or training activity	58.4	60.1	48.5	9.8 *	0.055	11.6 **	0.020
Has any degree, license, or certificate	72.1	70.8	68.0	4.1	0.356	2.9	0.505
Sample size (total = 572)	179	205	188				

SOURCE: MDRC calculations using data from the Work Rewards 42-Month Survey.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of families or sample members. A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause discrepancies in calculating sums and differences.

Sample sizes may vary across measures because of missing values.

the interpretation of the employment and earnings impacts presented below, relevant findings are summarized here.

By the end of Year 2, when the incentive payments had ceased, about 40 percent of the FSS+incentives participants had earned at least one incentive payment. They earned an average of $2,063 in incentive payments over the two-year period. Overall, most participants who earned cash rewards in Year 2 had also earned reward payment in Year 1. Those who were already working at random assignment were most likely to have earned payments, but about 20 percent of those who were not working at random assignment earned a reward payment for finding and maintaining full-time work for at least two months. As discussed below, employment and earnings impacts were concentrated in the nonworking subgroup.

Long-Term Impacts on Employment and Earnings

Through the four-year follow-up period covered by the interim report (about 42 months after random assignment), administrative records showed no gains in employment or earnings for the FSS-only program group. The FSS+incentives program group did display a statistically significant impact on employment in Year 1but not on earnings during this period. Therefore, it did not appear that the two FSS interventions were leading to strong changes in employment and earnings outcomes overall. There were, however, important impacts for one subgroup. Those in the FSS+incentives program who were not working at random assignment had large and statistically significant gains in employment and in earnings. The difference in impacts between the nonworking subgroup and those who were working at random assignment were also large and statistically significant. These subgroup and subgroup differential impacts were detected early in the follow-up period (around 18 months) and remained consistently strong through the four-year follow-up period. This finding suggests that the combination of incentives and case management was effective in helping some participants obtain employment but was not effective in helping those already employed to advance in earnings or employment through promotion, movement to better employment, or increasing employment stability.

Survey results covering a snapshot period roughly 42 months after random assignment were largely consistent with this story. FSS+incentives participants were more likely to be working, to be working full time, and to be receiving employer-provided benefits, and this was driven by impacts concentrated among those who were not working at the time of random assignment.

Analysis of the longer-term findings offers the opportunity to record the emergence of new impacts. However, in light of the interim findings, the most important question is about the persistence of the employment and earnings impacts for those in the FSS+incentives program who were not working at random assignment.

Table 4.2 presents individual-level impacts on UI employment and earnings for the FSS-only and FSS+incentives programs overall for the full six-year period after random assignment. The top half of the table presents quarterly employment rates averaged across the four quarters of each follow-up year for the three groups in the FSS study: FSS-only, FSS+incentives, and the control group. Employment rates for the control group represent the counterfactual — in other words, what would have happened in the absence of a program. In the first year of follow-up, both program groups display statistically significant impacts on the employment rate. These same data are presented graphically in Figure 4.1. The bottom panel of Table 4.2 presents the same information for earnings. Consistent with the interim findings, neither program produced impacts on employment or earnings; no new impacts emerged. During the six-year follow-up period, the control group averaged a quarterly employment rate of 42.8 percent and earned on average $46,514, or about $7,752 per year.

Table 4.3 presents six-year follow-up impacts on UI employment and earnings for the FSS-only and FSS+incentives programs broken down by employment status at random assignment. Here there are two questions: Did the programs produce statistically significant impacts for the subgroups presented, those working and those not working at random assignment? And, are there statistically significant differences between the impacts present in each subgroup?

The findings are roughly consistent with those presented in the interim report but with one important difference: The FSS-only program produced no impacts on UI employment or earnings for either employment subgroup. As found in previous reports, when considering the full follow-up period, the FSS+incentives program produced statistically significant impacts on employment and earnings for those who were not working at random assignment. These impacts, indicated by daggers in the "significance" column of the table, were also statistically significantly different from those experienced by participants who were working at the time of random assignment. (There was no impact on either employment or earnings for that subgroup.) Over the full period, the average quarterly employment rate for those in the FSS+incentives program who were not working at random assignment was 7.6 percentage points greater than for their counterparts in the control group, and their earnings were $8,500 greater. On the other hand, there are no impacts on earnings or employment for this group in Year 6 of follow-up. This finding may be a sign that the impact of the FSS+incentives program is fading as control group members begin to catch up to program participants. Further evidence of this possibility is the falling statistical significance of the difference between FSS+incentives and control group earnings over the follow-up period. Without additional data, it cannot be said for certain that the impacts have diminished; they could, for example, return in a further follow-up year, which would suggest the Year 6 findings were just a product of statistical "noise." However, this

Table 4.2

Six-Year Impacts on Employment and Earnings, FSS Study, Core Sample

Outcome	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control		FSS+Incentives vs. FSS-Only	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Quarterly employment rate (%)									
Year 1	47.1	47.2	43.1	3.9 **	0.038	4.0 **	0.034	0.1	0.961
Year 2	45.5	46.4	43.1	2.5	0.251	3.3	0.143	0.8	0.719
Year 3	44.5	46.0	42.4	2.2	0.353	3.6	0.144	1.5	0.560
Year 4	43.6	45.3	41.8	1.8	0.460	3.5	0.152	1.8	0.474
Year 5	43.9	44.9	42.0	1.9	0.433	3.0	0.237	1.1	0.669
Year 6	46.5	43.7	44.6	2.0	0.411	-0.9	0.720	-2.9	0.253
Full period	45.2	45.6	42.8	2.4	0.183	2.8	0.139	0.4	0.834
Earnings ($)									
Year 1	6,951	7,120	6,901	51	0.886	219	0.562	169	0.633
Year 2	7,571	7,654	7,272	299	0.522	381	0.444	82	0.862
Year 3	8,027	7,742	7,442	585	0.300	300	0.610	-285	0.608
Year 4	7,976	8,446	7,694	282	0.647	752	0.237	470	0.444
Year 5	8,436	8,553	8,039	398	0.553	514	0.458	117	0.863
Year 6	9,288	8,951	9,167	122	0.861	-216	0.766	-338	0.639
Full period	48,251	48,465	46,514	1,736	0.537	1,951	0.512	215	0.940
Sample size (total = 1,603)	546	523	534						

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The UI outcome data cover employment and earnings through March 31, 2015, and for 6 years after study entry for each sample member.

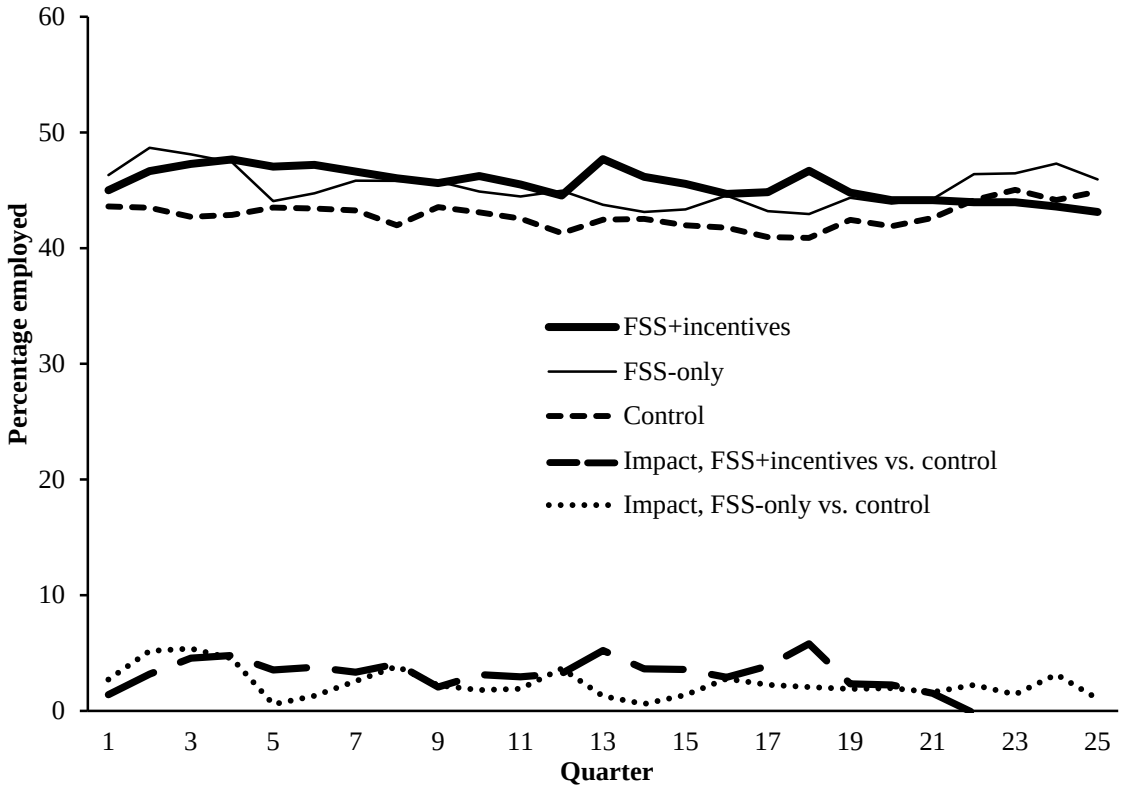
Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences. Dollar averages include zero values for nonworking sample members.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

Figure 4.1

Quarterly Employment Impacts, FSS Study, Core Sample



SOURCE: MDRC calculations from New York State unemployment insurance (UI) wage records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Quarter 1 refers to the quarter of random assignment.

This figure includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

Table 4.3

Six-Year Impacts on Employment and Earnings, by Employment Status at Random Assignment, FSS Study, Core Sample

Outcome	Average Outcome Levels: FSS-Only	FSS+ Incentives	Control Group	FSS-Only vs. Control: Difference (Impact)		P-Value	Sig.	FSS+Incentives vs. Control: Difference (Impact)		P-Value	Sig.	FSS+Incentives vs. FSS-Only: Difference (Impact)		P-Value	Sig.
Not working at random assignment															
Quarterly employment rate (%)															
Year 1	25.7	27.9	20.9	4.8	*	0.087		7.0	**	0.014		2.1		0.457	
Year 2	27.7	31.2	23.3	4.4		0.162		7.9	**	0.014	††	3.5		0.301	
Year 3	29.0	33.7	25.9	3.0		0.362		7.7	**	0.025		4.7		0.187	
Year 4	27.9	34.1	25.3	2.6		0.421		8.8	***	0.009	††	6.2	*	0.074	
Year 5	29.0	36.0	26.1	2.9		0.388		9.9	***	0.005	†††	7.0	*	0.050	†
Year 6	32.3	35.4	31.1	1.2		0.725		4.3		0.219	†	3.1		0.374	†
Full period	28.6	33.0	25.4	3.2		0.210		7.6	***	0.004	††	4.4	*	0.097	
Total earnings ($)															
Year 1	2,504	3,114	2,245	259		0.537		869	*	0.063	†	610		0.167	
Year 2	3,746	4,472	2,805	941		0.101		1,668	***	0.007	††	726		0.240	
Year 3	4,365	4,890	3,409	956		0.165		1,481	**	0.028	†	525		0.460	
Year 4	4,285	5,519	3,811	474		0.534		1,708	**	0.026		1,234		0.124	
Year 5	5,113	5,934	4,461	652		0.454		1,473	*	0.081		820		0.344	
Year 6	5,942	6,724	5,423	519		0.555		1,302		0.158	†	783		0.413	
Full period	25,955	30,653	22,153	3,802		0.271		8,500	**	0.016	††	4,698		0.191	
Sample size (total = 814)	270	271	273												

(continued)

Table 4.3 (continued)

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.	FSS+Incentives vs. FSS-Only: Difference (Impact)	FSS+Incentives vs. FSS-Only: P-Value	FSS+Incentives vs. FSS-Only: Sig.
Working at random assignment												
Quarterly employment rate (%)												
Year 1	69.3	69.0	66.9	2.5	0.350		2.2	0.387		-0.3	0.917	
Year 2	63.7	63.4	64.6	-1.0	0.752		-1.3	0.690	††	-0.3	0.926	
Year 3	60.2	60.4	60.5	-0.3	0.929		-0.1	0.968		0.2	0.963	
Year 4	59.0	58.6	59.9	-0.8	0.813		-1.3	0.722	††	-0.5	0.896	
Year 5	58.6	55.9	59.3	-0.7	0.846		-3.4	0.354	†††	-2.7	0.463	†
Year 6	60.6	53.8	59.3	1.4	0.702		-5.5	0.137	†	-6.8 *	0.066	
Full period	61.9	60.2	61.7	0.2	0.948		-1.6	0.553	††	-1.7	0.517	
Total earnings ($)												
Year 1	11,618	11,469	11,845	-226	0.687		-376	0.527	†	-149	0.790	
Year 2	11,642	11,115	11,973	-331	0.657		-858	0.290	††	-527	0.476	
Year 3	11,844	10,903	11,703	142	0.876		-800	0.406	†	-942	0.274	
Year 4	11,848	11,778	11,724	123	0.899		54	0.958		-69	0.942	
Year 5	11,932	11,603	11,804	127	0.901		-201	0.856		-328	0.757	
Year 6	12,792	11,563	13,127	-334	0.761		-1,564	0.168	†	-1,229	0.274	
Full period	71,676	68,432	72,176	-499	0.911		-3,744	0.434	††	-3,245	0.466	
Sample size (total = 771)	271	246	254									

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The UI outcome data cover employment and earnings through March 31, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Differences across subgroup impacts were tested for statistical significance. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences. Dollar averages include zero values for nonworking sample members.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

finding would be consistent with findings from other workforce studies (including welfare-to-work programs) that show initial impacts typically fade six to seven years after program entry.[6]

Assessing the Statistical Confidence of the Impact Estimates

Table 4.4 summarizes the full-period employment and earnings findings for the core sample and the employment subgroups. Along with the estimated differences between research groups on each measure, the table also displays a numerical range associated with these estimates. The estimated difference is the middle point of this range. The range allows researchers to express a level of certainty about the exact value of the difference between research groups.[7]

As noted above (see Box 4.1 and "Interpreting Impacts"), statistically significant differences (impacts) indicate that zero is not included in the range. A difference that is not statistically significant is not necessarily zero; it may be any value within the range. For example, for total earnings, those in the FSS+incentives group not working at random assignment experienced a statistically significant impact of $8,500 dollars over the control group. This is associated with a range of potential true differences of $2,731 to $14,269. In contrast, the difference in total earnings for those in the FSS+incentives group who were working at random assignment is not statistically significant. The estimated difference is –$3,744, which is associated with a range of potential true differences of –$11,610 to $4,121, which includes zero as well as both positive and negative possible differences.

These ranges of potential differences are central to the discussion in Chapter 6 of the costs and benefits of the FSS-only and FSS+incentives programs.

Household-Level Analysis

The tables presented above display impacts at the individual level. Another way to look at program impacts is to consider their effects on the households of those who participate in the program. While impacts on earnings can be investigated at the individual level, it is also possible to ask whether the programs altered aggregate household earnings. If multiple adults in a household took advantage of FSS services, the gains to a household could be amplified. On the other hand, in response to increased earnings by a program participant, other household members may decrease their own work efforts and thus earnings, diminishing the aggregate effect on the household. To investigate this possibility, the evaluation examined impact models on earnings at the household level. However, in order to collect UI records on other adults in

[6]Michalopoulos (2005).

[7]The range presented in the table is the 90 percent confidence interval for each estimate.

Table 4.4

Six-Year Impacts on Employment and Earnings with Confidence Intervals, FSS Study, Core Sample

Outcome	FSS-Only vs. Control			FSS+Incentives vs. Control		
	Difference (Impact)	P-Value	90% Confidence Interval	Difference (Impact)	P-Value	90% Confidence Interval
Core sample						
Quarterly employment rate (%)	2.4	0.183	-0.6 to 5.3	2.8	0.139	-0.3 to 5.8
Earnings ($)	1,736	0.537	-2,893 to 6,365	1,951	0.512	-2,940 to 6,842
Not working at baseline						
Quarterly employment rate (%)	3.2	0.210	-1. to 7.3	7.6 ***	0.004	3.3 to 11.9
Earnings ($)	3,802	0.271	-1,880 to 9,484	8,500 **	0.016	2,731 to 14,269
Working at baseline						
Quarterly employment rate (%)	0.2	0.948	0.1 to 0.2	-1.6	0.553	-1.6 to -1.5
Earnings ($)	-499	0.911	-7,889 to 6,890	-3,744	0.434	-11,610 to 4,121

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The UI outcome data cover employment and earnings through March 31, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences. Dollar averages include zero values for nonworking sample members.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

households with more than one adult, such individuals would have to consent to participate in the study. While some did, there are households with one or more adults whose records could not be accessed. The random assignment design of the study means that households with such incomplete UI records appear in roughly equal numbers in each study group. That means that the differences between the study groups (and potential impacts) will still be correctly estimated but the overall levels presented for each group (average household earnings) will likely be

too low. The analysis did not find statistically significant differences in household earnings. The results of this analysis are presented in Appendix Table A.4.

Beyond earnings, the household is the natural level of analysis for impact models exploring some outcomes. For example, some benefits, such as TANF and housing assistance, are distributed to households and calculated using household characteristics like size and combined earnings. The models presented in Chapter 5 focus on household-level impacts on material hardship, public benefits receipt, and income.

Conclusion

The FSS programs did not produce impacts on earnings or employment for those working at random assignment; such impacts were limited to those in the FSS+incentives group who were not working at random assignment. However, those working at random assignment were more likely to earn the special work incentive payments and, as discussed in Chapter 3, more likely to graduate from FSS and receive an escrow disbursement. In other words, those who received the largest payouts from the program are not generally those whose behavior and outcomes were changed relative to the control. This phenomenon, where some participants benefit from programmatic incentives without affecting the outcomes these incentives were meant to influence, known as "windfall," is common even in successful programs, though the level of windfall varies. The difference between successful program outcomes and the impacts of a program (the differences in outcomes relative to the control group, which represents the counterfactual) underscores the importance of formal evaluation in understanding the costs and benefits of a program.

Earnings and employment are one side of the story. The other is public benefits receipt. Chapter 5 looks at impacts on TANF, SNAP and Section 8 voucher receipt and value to examine whether the FSS programs, either through their effects on employment and earnings or through other channels, reduced participant reliance on public benefits.

Chapter 5

Impacts of FSS-Only and FSS+Incentives on Income, Material Well-Being, and Public Benefit Receipt

The Family Self-Sufficiency (FSS) program was designed to help participants increase their earnings and reduce their reliance on public assistance, including Housing Choice Voucher (HCV) assistance. The escrow account, discussed in Chapter 3, is meant to encourage work and therefore improve earnings, which may lead to a reduction in the subsidy amount provided by the housing agency. And, graduation from the FSS program requires, among other things, that participants' households not receive Temporary Assistance for Needy Families (TANF) support for 12 months prior to program exit. Though it was neither required for graduation nor an explicit part of the FSS program model, an increase in program participants' earnings might be reflected in decreased usage of Supplemental Nutrition Assistance Program (SNAP) benefits (food stamps) as well.

The previous chapter showed that neither FSS program produced employment or earnings impacts overall, but FSS+incentives did influence these outcomes for those who were not working at random assignment. Within that context, this chapter examines the spillover effects of the program on receipt of public benefits, including TANF, SNAP, and HCV assistance, through six years of follow-up.

In presenting these findings, the chapter also briefly recaps relevant findings from the interim report on these and related measures, such as the poverty and material well-being data collected as part of the 42-month follow-up survey.

In brief, the findings indicate the following:

- The programs did not produce statistically significant reductions in poverty or material hardship as measured on the 42-month survey and before escrow disbursement.
- Both the FSS-only and the FSS+incentives programs led to temporary, statistically significant decreases in household TANF receipt during the fifth year of the FSS program.
- The decrease in TANF is not tied to employment or earnings impacts; it appears to be associated with FSS graduation requirements, meaning otherwise qualified households forfeited their TANF benefits in an effort to receive escrow.

- Neither program generated statistically significant reductions in HCV receipt or the value of the subsidy households received. This is true even for those in the FSS+incentives program who were not working at baseline, a subgroup that experienced impacts on earnings and employment that persisted through most of the follow-up period.
- There is mixed evidence that both programs reduced SNAP receipt late in the follow-up period, but the mechanism for this impact is unclear.

Data Sources and Follow-Up Period

Data on monthly receipt of TANF, Safety Net Assistance (SNA), and SNAP benefits were obtained from the New York City Human Resources Administration (HRA).[1] Data on housing voucher receipt and amounts were obtained from the New York City Department of Housing Preservation and Development (HPD).[2] These data are also available for each study participant's household for several months before and 72 months after the point of random assignment. Effects on benefits receipt are estimated at the household level. Poverty and material hardship outcomes measured at roughly 42 months after random assignment, and reviewed briefly below, were constructed from survey responses.[3] Program impacts on TANF/SNA, food stamps, and housing subsidies were estimated for both the core and the full samples. The report presents core sample impacts. Estimated impacts for the full sample are not shown in this report but are similar to the core sample estimates.

Findings

Poverty and Material Hardship

As a program designed to improve earnings and employment outcomes and reduce reliance on public benefits, the designers of FSS hoped that it would ultimately reduce material hardship for participants. However, the move to work, when coupled with the rise in associated costs (for example, child care or transportation) and the reduction of public benefits, could leave participants no better off. The Work Rewards 42-month survey included questions to measure

[1]The SNA program provides assistance to individuals and families in New York State who do not qualify for the time-limited federal TANF program.

[2]"Receipt" refers to whether a household receives TANF or SNAP benefits at all; "amount" refers to the cash value of the benefit a household receives.

[3]See the Work Rewards interim report for details (Nuñez, Verma, and Yang, 2015a). Box 4.1 in Chapter 4 explains how to interpret impact findings.

the impact of the FSS-only and FSS+incentives programs on poverty and the incidence of material hardship and material well-being. As the survey was conducted midway through the program for most FSS and FSS+incentives participants, it cannot speak to the effects of escrow disbursement on poverty and material hardship. However, it is still relevant as an indication of normal income flows outside of the one-time lump sum cash infusion associated with escrow disbursement.

A summary of relevant survey findings is presented in Table 5.1. Survey responses indicated that programs did not lead to statistically significant reductions in pretax income for participants overall, whether or not they were working at random assignment. Given the overall lack of impacts on unemployment insurance (UI) earnings or public benefits receipt, the finding was consistent with expectations. That there was no reduction in poverty for the subgroup that experienced gains in employment and earnings suggests that those gains, though large in relative terms, were insufficient to change material conditions for most participants. The broader finding seems to be consistent with other research showing that some types of workforce interventions are able to improve employment and earnings, but not enough to move families out of poverty.

Similarly, the programs did not lead to statistically significant reductions in the incidence of specific material hardships (for example, failure to pay rent or mortgage, disconnection of utilities) for participants overall or for subgroups defined by employment status at random assignment. The measures were, however, dichotomous (meaning that survey questions could only be answered "yes" or "no") and could not speak to impacts on the number of incidents — or intensity — of each type.

Public Benefits Receipt

As noted, FSS was designed to decrease reliance on public benefits. Graduation and escrow disbursement are conditioned on leaving cash assistance; employment and earnings gains should decrease housing subsidy payments, and other benefits like SNAP may also decrease if earnings gains are sufficient. The programs represent substantial costs to the government. As shown in Appendix Table A.6, which presents total average expenditure by household on TANF, SNAP, and housing assistance for the control group over the six years of follow-up, the average control household received $86,510 in benefits.

At the time of the interim report, which focused on four years of follow-up, the findings for impacts on public benefits receipt were mixed. Analysis indicated that the TANF amount may have begun to drop in the FSS+incentives program during the first quarter of the fifth year of follow-up, the last quarter for which records were available. Since this impact was not concentrated among those who were not working at random assignment, it might be seen as reflecting a move to meet FSS graduation requirements, which stipulate that participants must

Table 5.1

Summary Impacts on Poverty and Material Hardship, FSS Study, 42-Month Survey

Outcome	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value
All households							
Household income at or below the federal poverty level[a] (%)	77.9	73.6	76.5	1.4	0.655	-2.9	0.354
Any hardship in the past 12 months (%)	62.6	61.6	63.4	-0.8	0.832	-1.8	0.608
Financial well-being score (4 = low; 16 = high)	8.3	8.4	8.3	0.0	0.898	0.1	0.651
Sample size (total = 1,152)	385	386	381				
Head of household not working at random assignment							
Household income at or below the federal poverty level[a] (%)	82.5	79.3	84.1	-1.6	0.696	-4.8	0.238
Any housing/utilities material hardship in the past 12 months (%)	65.6	61.1	59.3	6.4	0.220	1.9	0.711
Financial well-being score (4 = low; 16 = high)	8.1	8.2	8.2	-0.2	0.552	0.0	0.890
Sample size (total = 568)	178	203	187				

SOURCE: MDRC calculations using data from the Work Rewards 42-Month Survey.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of families or sample members. A two-tailed t-test was applied to differences between outcomes for the program and control groups. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause discrepancies in calculating sums and differences.

Sample sizes may vary across measures because of missing values.

This table reports on degrees, licenses, and diplomas received, regardless of whether they were received before or after random assignment.

[a]Percentages may sum to more than the number participating in any activity because sample members could list more than one response.

not receive TANF or SNA for 12 months before graduation. In other words, individuals might not be leaving TANF because of increased earnings but intentionally exiting to qualify for graduation and earn escrow. For this reason, impacts might emerge in both FSS programs during the fifth year of follow-up.

Food stamp receipt and value also appeared to have dropped in the FSS+incentives program group in Year 4. There was not strong evidence, however, that these impacts were pronounced in the nonworking subgroup, which experienced the noted gains in employment and earnings. This finding made the impact puzzling, since there was no obvious mechanism for this change; SNAP receipt is not tied to FSS graduation requirements.

In light of these findings, several important questions remained for the longer-term impact analysis, relying on six years of data. First, did the apparent fall in TANF receipt at the end of the four-year follow-up period point to the emergence of a sustained impact, or was it simply a statistical "blip"? Second, if an impact did emerge, would it persist after the FSS programs ended? Third, would the SNAP impacts persist? And fourth, would FSS graduation and escrow disbursement lead to the emergence of impacts on housing voucher receipt or value?

Did an Impact on TANF Receipt Emerge and Did the SNAP Effect Persist?

Table 5.2 presents overall impacts for the FSS study on household TANF and SNAP receipt and amounts over the six-year follow-up period.[4] The statistically significant decrease in TANF receipt found at the end of the interim follow-up period appeared to persist through the fifth year of follow-up. TANF receipt was lower for both program groups in Year 5. For the FSS-only program, average quarterly receipt rates were 4.8 percentage points lower than for the control group (21.3 percent versus 26.1 percent) during the fifth year of the program. For the FSS+incentives program, average quarterly rates were 4.2 percentage points lower (21.9 percent versus 26.1 percent). These impacts are not, however, present in the sixth year of follow-up (the post-program period). This finding is consistent with the hypothesis presented in the interim report that the apparent impact on TANF receipt was associated with FSS program graduation requirements. The associated drop in TANF amount is not statistically significant, though this may be because the sample size is too small to detect an impact.

Both programs also led to statistically significant decreases in the receipt of SNAP benefits but not in the amount in the fifth year of the program. For the FSS-only program, this impact persisted through the sixth year of follow-up; for the FSS+incentives program, it did not. As SNAP receipt is not tied to FSS graduation, it is unclear what is driving this impact.

[4]Households that do not receive a benefit are coded as receiving $0 and are included in the average benefits value calculation.

Table 5.2

Six-Year Impacts on Household Benefits Receipt, FSS Study, Core Sample

Outcome	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control		FSS+Incentives vs. FSS-Only	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
TANF/SNA receipt									
Received TANF/SNA, Years 1-6 (%)	55.6	55.0	59.2	-3.6	0.183	-4.2	0.123	-0.6	0.822
Average quarterly receipt (%)									
Year 1	30.4	30.2	32.7	-2.3	0.221	-2.5	0.197	-0.2	0.936
Year 2	26.2	27.4	30.6	-4.4 **	0.038	-3.2	0.135	1.2	0.571
Year 3	24.6	24.1	26.8	-2.2	0.318	-2.6	0.227	-0.5	0.826
Year 4	23.7	23.6	26.6	-2.9	0.196	-3.0	0.179	-0.1	0.950
Year 5	21.3	21.9	26.1	-4.8 **	0.031	-4.2 *	0.058	0.6	0.804
Year 6	21.4	21.7	24.5	-3.2	0.137	-2.9	0.178	0.3	0.897
Full period	24.6	24.8	27.9	-3.3 *	0.051	-3.1 *	0.070	0.2	0.901
Received in last quarter	22.2	22.4	23.4	-1.2	0.636	-1.0	0.684	0.2	0.950
Amount received ($)									
Year 1	1,416	1,516	1,550	-133	0.208	-33	0.755	100	0.349
Year 2	1,412	1,411	1,583	-171	0.212	-171	0.216	0	0.998
Year 3	1,253	1,241	1,393	-140	0.309	-152	0.274	-12	0.930
Year 4	1,225	1,272	1,391	-166	0.253	-120	0.415	47	0.750
Year 5	1,244	1,182	1,391	-146	0.328	-209	0.167	-62	0.679
Year 6	1,184	1,232	1,264	-80	0.591	-32	0.829	48	0.751
Full period	7,735	7,854	8,572	-837	0.200	-717	0.276	120	0.856
Last quarter	305	297	291	14	0.736	7	0.873	-7	0.861

(continued)

Table 5.2 (continued)

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. FSS-Only: Difference (Impact)	FSS+Incentives vs. FSS-Only: P-Value
Food stamp receipt									
Received food stamps, Years 1-6 (%)	89.6	89.7	92.2	-2.6	0.139	-2.5	0.163	0.1	0.944
Average quarterly receipt (%)									
Year 1	75.3	76.3	74.4	0.9	0.653	1.9	0.358	1.0	0.633
Year 2	76.5	76.3	77.2	-0.7	0.765	-1.0	0.681	-0.3	0.908
Year 3	76.1	75.3	76.2	-0.1	0.965	-0.8	0.724	-0.7	0.756
Year 4	73.5	70.9	76.6	-3.1	0.212	-5.7 **	0.022	-2.6	0.292
Year 5	68.5	68.1	74.5	-5.9 **	0.022	-6.4 **	0.014	-0.5	0.851
Year 6	62.0	65.6	67.9	-5.9 **	0.030	-2.3	0.397	3.6	0.191
Full period	72.0	72.1	74.5	-2.5	0.210	-2.4	0.229	0.1	0.969
Last quarter	61.6	64.2	67.4	-5.8 **	0.047	-3.2	0.281	2.6	0.374
Amount received ($)									
Year 1	3,028	3,005	2,973	55	0.554	32	0.734	-23	0.805
Year 2	3,416	3,371	3,396	20	0.869	-24	0.841	-44	0.715
Year 3	3,371	3,220	3,275	96	0.472	-55	0.681	-151	0.260
Year 4	3,152	2,916	3,222	-70	0.621	-306 **	0.032	-236 *	0.096
Year 5	2,950	2,809	3,038	-88	0.549	-228	0.122	-141	0.339
Year 6	2,436	2,401	2,493	-57	0.686	-92	0.521	-35	0.808
Full period	18,352	17,722	18,397	-44	0.945	-674	0.294	-630	0.325
Last quarter	588	580	592	-4	0.910	-12	0.754	-7	0.840
Sample size (total = 1,455)	492	476	487						

SOURCE: MDRC calculations using administrative records data from the New York City Human Resources Administration (HRA).

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The HRA outcome data cover TANF/SNA and food stamp receipt through March 31, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

TANF/SNA and food stamp outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive TANF/SNA or food stamps.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance.

Table 5.3 presents impacts on TANF and SNAP outcomes by heads of households' work status at random assignment. For those who were not working at random assignment, the FSS-only program produced a statistically significant decrease in TANF receipt (but not amount) in Year 5. For example, 29.3 percent of FSS-only participants received TANF in Year 5 versus 35.8 percent of the control group, a statistically significant difference of 6.5 percentage points. Though earnings and employment impacts were concentrated in the FSS+incentives group, there is no statistically significant impact on TANF receipt for this subgroup. For those working at random assignment, there is no impact on TANF receipt for either program group.

SNAP impacts on the subgroups are mixed. There is evidence that the FSS-only intervention produced a statistically significant decrease in SNAP receipt in both work subgroups — in Year 5 for the working subgroup and in Year 6 for the nonworking subgroup — but the difference between the impacts in each subgroup is not itself statistically significant. The FSS+incentives intervention produced impacts on SNAP receipt in Year 5 for those who were working at random assignment but not for those who were not working at random assignment (though the difference in impact between the subgroups is not statistically significant). Neither program decreased SNAP benefits amount during the same period that they reduced SNAP receipt.

Housing Assistance: Did Impacts on Housing Choice Voucher Receipt Emerge?

Despite the robust findings regarding gains in employment and earnings for those in the FSS+incentives group who were not working at random assignment, there was no concomitant drop in receipt or value of housing vouchers during the four years of follow-up covered in the interim report. Since earnings gains are supposed to increase total tenant payment (though here escrow would be credited as part of FSS program participation), changes associated with the employment and earnings impacts were expected. That no changes occurred suggests that the process by which tenant payments change is much more complex than it appears.

Table 5.4 presents impacts on housing voucher receipt and subsidy amount for the six-year follow-up period.[5] Consistent with the findings from the interim report and despite the graduation of about 40 percent of participants from the FSS program, neither program produced impacts on either voucher receipt or housing subsidy value. Although voucher receipt dropped in both program groups, from almost 99 percent at baseline to around 84 percent by the end of

[5]The subsidy value reported is Housing Assistance Payment (HAP), which is the amount of money HCV households receive from the housing agency as part of their contract.

Table 5.3

Six-Year Impacts on Household Benefits Receipt, by Employment Status at Random Assignment, FSS Study, Core Sample

Outcome	Average Outcome Levels			FSS-Only vs. Control			FSS+Incentives vs. Control		
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	Sig.
Head of household not working at random assignment									
Received TANF/SNA, Years 1-6 (%)	68.8	69.7	69.9	-1.1	0.764		-0.2	0.966	
Average quarterly TANF/SNA receipt (%)									
Year 1	44.3	47.0	50.8	-6.6 **	0.030	††	-3.8	0.209	
Year 2	37.2	39.9	46.1	-9.0 ***	0.009	††	-6.3 *	0.064	
Year 3	35.0	35.8	38.1	-3.1	0.388		-2.3	0.519	
Year 4	33.1	33.4	36.2	-3.1	0.382		-2.8	0.439	
Year 5	29.3	31.8	35.8	-6.5 *	0.068		-4.0	0.259	
Year 6	28.6	31.2	33.4	-4.8	0.169		-2.2	0.518	
Full period	34.6	36.5	40.1	-5.5 **	0.046		-3.6	0.196	
Last quarter	30.6	33.9	34.1	-3.6	0.373		-0.2	0.956	
Total amount of TANF/SNA received ($)									
Year 1	2,182	2,416	2,454	-272	0.110		-38	0.821	
Year 2	2,130	2,129	2,514	-384 *	0.097		-385 *	0.094	
Year 3	1,890	1,884	2,168	-278	0.242		-284	0.231	
Year 4	1,819	1,802	2,073	-254	0.305		-271	0.273	
Year 5	1,815	1,697	2,044	-228	0.360		-347	0.163	
Year 6	1,680	1,765	1,781	-101	0.692		-16	0.951	
Full period	11,516	11,693	13,033	-1,517	0.181		-1,340	0.236	
Last quarter	428	463	428	0	0.999		35	0.625	
Received food stamps, Years 1-6 (%)	91.9	94.5	93.2	-1.4	0.531		1.3	0.566	††

(continued)

Table 5.3 (continued)

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.
Average quarterly food stamp receipt (%)									
Year 1	78.9	86.9	84.1	-5.2 *	0.059	†††	2.8	0.304	
Year 2	78.4	83.4	84.2	-5.9 *	0.051	††	-0.9	0.775	
Year 3	78.4	81.6	83.7	-5.3 *	0.092	††	-2.1	0.509	
Year 4	76.5	76.3	82.8	-6.3 *	0.061		-6.4 *	0.055	
Year 5	72.4	72.8	77.7	-5.4	0.140		-4.9	0.177	
Year 6	65.5	70.3	74.4	-9.0 **	0.019		-4.2	0.277	
Full period	75.0	78.6	81.2	-6.2 **	0.023	†	-2.6	0.338	
Last quarter	65.8	68.9	74.9	-9.1 **	0.024		-6.1	0.131	
Total amount of food stamps received ($)									
Year 1	3,303	3,220	3,269	34	0.789		-49	0.704	
Year 2	3,589	3,465	3,571	19	0.907		-106	0.508	
Year 3	3,491	3,228	3,504	-12	0.946		-275	0.137	†
Year 4	3,219	2,916	3,342	-123	0.520		-426 **	0.026	
Year 5	2,951	2,874	3,018	-67	0.740		-144	0.473	
Year 6	2,437	2,430	2,666	-229	0.242		-236	0.226	
Full period	18,990	18,132	19,369	-378	0.668		-1,236	0.161	
Last quarter	594	586	643	-49	0.327		-57	0.253	
Sample size (total = 721)	237	241	243						

(continued)

Table 5.3 (continued)

Outcome	Average Outcome Levels			FSS-Only vs. Control			FSS+Incentives vs. Control		
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	Sig.
Head of household working at random assignment									
Received TANF/SNA, Years 1-6 (%)	42.9	40.1	48.2	-5.3	0.194		-8.0 *	0.053	
Average quarterly TANF/SNA receipt (%)									
Year 1	16.2	13.8	14.6	1.5	0.501	††	-0.8	0.738	
Year 2	14.7	15.4	15.4	-0.6	0.808	††	0.1	0.975	
Year 3	13.7	13.1	16.0	-2.3	0.347		-2.9	0.256	
Year 4	13.6	14.4	17.1	-3.5	0.204		-2.7	0.336	
Year 5	13.0	12.5	15.6	-2.6	0.324		-3.1	0.253	
Year 6	13.9	12.3	15.4	-1.6	0.537		-3.1	0.233	
Full period	14.2	13.6	15.7	-1.5	0.436		-2.1	0.295	
Last quarter	13.5	11.7	12.9	0.6	0.842		-1.2	0.677	
Amount of TANF/SNA received ($)									
Year 1	638	620	671	-32	0.786		-50	0.680	
Year 2	668	694	704	-35	0.806		-9	0.950	
Year 3	589	638	649	-60	0.669		-11	0.941	
Year 4	607	775	721	-113	0.464		54	0.732	
Year 5	663	695	716	-53	0.749		-21	0.901	
Year 6	690	694	758	-69	0.667		-64	0.695	
Full period	3,855	4,117	4,218	-363	0.568		-101	0.876	
Last quarter	180	142	152	28	0.535		-11	0.817	

(continued)

Table 5.3 (continued)

Outcome	Average Outcome Levels			FSS-Only vs. Control			FSS+Incentives vs. Control		
	FSS-Only	FSS+Incentives	Control Group	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	Sig.
Received food stamps, Years 1-6 (%)	87.8	85.5	91.3	-3.5	0.201		-5.9 **	0.037	††
Average quarterly food stamp receipt (%)									
Year 1	71.9	66.4	64.5	7.4 **	0.015	†††	1.9	0.540	
Year 2	74.7	70.0	70.0	4.8	0.168	††	0.0	0.991	
Year 3	73.6	70.1	68.8	4.8	0.176	††	1.3	0.713	
Year 4	70.4	66.7	70.5	-0.2	0.962		-3.8	0.311	
Year 5	64.9	64.2	71.0	-6.2 *	0.099		-6.9 *	0.072	
Year 6	58.5	61.7	61.2	-2.8	0.483		0.5	0.905	
Full period	69.0	66.5	67.7	1.3	0.643	†	-1.2	0.691	
Last quarter	57.3	60.4	59.4	-2.1	0.620		1.0	0.814	
Total amount of food stamps received ($)									
Year 1	2,785	2,840	2,684	102	0.454		156	0.262	
Year 2	3,277	3,321	3,212	65	0.717		109	0.552	
Year 3	3,278	3,271	3,054	224	0.248		218	0.273	†
Year 4	3,100	2,982	3,109	-9	0.965		-127	0.554	
Year 5	2,976	2,796	3,052	-75	0.725		-256	0.245	
Year 6	2,458	2,395	2,324	134	0.520		70	0.741	
Full period	17,875	17,605	17,435	440	0.633		170	0.857	
Last quarter	589	580	538	51	0.354		41	0.463	
Sample size (total = 722)	251	232	239						

(continued)

Table 5.3 (continued)

SOURCE: MDRC calculations using administrative records data from the New York City Human Resources Administration (HRA).

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The HRA outcome data cover TANF/SNA and food stamp receipt through March 31, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

TANF/SNA and food stamp outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive TANF/SNA or food stamps.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance.

Table 5.4

Six-Year Impacts on Section 8 Housing, FSS Study, Core Sample

Outcome	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control		FSS+Incentives vs. FSS-Only	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Received Section 8 housing subsidy (%)									
Year 1	98.8	98.8	98.3	0.5	0.541	0.5	0.534	0.0	0.987
Year 2	95.2	93.8	96.7	-1.4	0.290	-2.9 **	0.037	-1.4	0.298
Year 3	92.2	91.6	94.1	-1.9	0.247	-2.5	0.133	-0.6	0.720
Year 4	90.3	89.2	90.9	-0.6	0.758	-1.7	0.381	-1.1	0.567
Year 5	87.3	87.1	87.7	-0.5	0.830	-0.7	0.755	-0.2	0.920
Year 6	83.3	84.4	84.9	-1.6	0.493	-0.6	0.814	1.0	0.657
Full period	98.8	98.8	98.3	0.5	0.541	0.5	0.534	0.0	0.987
Number of months received Section 8 housing subsidy									
Year 1	11.7	11.5	11.7	0.0	0.963	-0.2	0.187	-0.2	0.171
Year 2	11.2	11.2	11.5	-0.2	0.184	-0.3 *	0.090	-0.1	0.703
Year 3	10.9	10.8	11.1	-0.2	0.254	-0.3	0.174	0.0	0.817
Year 4	10.7	10.5	10.8	-0.1	0.636	-0.2	0.337	-0.1	0.621
Year 5	10.2	10.3	10.3	-0.2	0.527	-0.1	0.814	0.1	0.695
Year 6	9.9	9.9	9.9	-0.1	0.764	0.0	0.959	0.1	0.805
Full period	64.5	64.3	65.3	-0.8	0.467	-1.0	0.361	-0.2	0.845
Section 8 housing subsidy (HAP to owner)[a] ($)									
Year 1	10,041	9,839	9,897	144	0.429	-58	0.752	-202	0.270
Year 2	10,174	9,726	9,868	307	0.179	-142	0.538	-449 *	0.051
Year 3	10,269	9,776	9,921	348	0.198	-145	0.597	-493 *	0.071
Year 4	10,427	9,803	10,190	237	0.434	-388	0.204	-624 **	0.040
Year 5	10,251	9,999	10,326	-75	0.823	-327	0.336	-252	0.458
Year 6	9,893	9,666	9,803	91	0.801	-136	0.707	-227	0.531
Full period	61,056	58,810	60,005	1,051	0.473	-1,195	0.419	-2,246	0.128

(continued)

Table 5.4 (continued)

Outcome	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control		FSS+Incentives vs. FSS-Only	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Total Section 8 housing subsidy (Total HAP)[b] ($)									
Year 1	10,742	10,568	10,639	103	0.588	-72	0.709	-175	0.361
Year 2	10,867	10,467	10,614	253	0.289	-147	0.541	-400 *	0.096
Year 3	10,928	10,476	10,601	326	0.247	-126	0.659	-452	0.112
Year 4	11,098	10,510	10,874	225	0.478	-363	0.255	-588 *	0.065
Year 5	10,929	10,722	11,017	-88	0.803	-295	0.407	-207	0.559
Year 6	10,557	10,372	10,472	85	0.821	-100	0.793	-185	0.625
Full period	65,122	63,114	64,218	904	0.555	-1,103	0.476	-2,007	0.193
Sample size (total = 1,455)	492	476	487						

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Housing subsidy outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive housing subsidies.

HAP is Housing Assistance Payment.

[a]The measure reflects the housing subsidy paid by the housing agency to landlords. This amount excludes utility allowance payments made directly to tenants. A separate analysis of HPD data showed that in 98 percent of cases, the subsidy paid to the owner and total subsidy for a voucher household were exactly the same.

[b]The measure reflects the total housing subsidy paid by the housing agency to landlords and tenants.

Year 6, this change was mirrored in the control group. Overall, HPD spent an average of around $64,000 per resident on subsidies during the follow-up period (or between $10,000 and $11,000 a year).

Table 5.5 presents impacts on housing voucher receipt and subsidy value for the six-year follow-up period, by employment status at random assignment. The results are similar: Neither program produced statistically significant reductions in housing voucher receipt or subsidy amount for either subgroup. This is true even for those in the FSS+incentives group who were not working at random assignment, the group that experienced impacts on earnings and employment. Those who are newly working may receive child care expense allowances from public housing agencies that partially offset earnings gains that would have otherwise diminished the value of the housing voucher. Though there is no evidence that the nonworking subgroup was more likely to move during the study period, it is also possible that those who did move were more likely to move into housing closer to the payment standard. This could lead to a net increase in housing assistance regardless of earnings gains.[6]

Assessing the Statistical Confidence of the Impact Estimates

Table 5.6 summarizes the findings for the full-period benefits receipt and amount among the core sample and the employment subgroups. Along with the estimated differences between research groups on each measure, the table also displays a numerical range associated with these estimates. The estimated difference is the middle point of this range. The range allows researchers to express a level of certainty about the exact value of the difference between research groups.[7]

As noted in Chapter 4, statistically significant differences (impacts) indicate that zero is not included in the range. A difference that is not statistically significant is not necessarily zero; it may be any value within the range. For example, the difference in TANF amount for those in the FSS-only program who were working at random assignment compared with the control group is not statistically significant. The estimated difference is –$363. This is associated with a range of potential true differences of –$1,550 to $825, which includes zero as well as both positive and negative possible differences.

These ranges of potential differences are central to the discussion in Chapter 6 of the costs and benefits of the FSS-only and FSS+incentives programs

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[6]For an analysis of the impacts of the programs on total household income, see Appendix Table A.4.

[7]The range presented in the table is the 90 percent confidence interval for each estimate.

Table 5.5

Six-Year Impacts on Section 8 Housing, by Employment Status at Random Assignment, FSS Study, Core Sample

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.	FSS+Incentives vs. FSS-Only: Difference (Impact)	FSS+Incentives vs. FSS-Only: P-Value	FSS+Incentives vs. FSS-Only: .
Head of household not working at random assignment												
Received Section 8 housing subsidy (%)												
Year 1	99.5	99.7	97.9	1.6	* 0.078		1.7	* 0.058		0.1	0.895	
Year 2	94.2	95.8	95.1	-0.9	0.653		0.7	0.736	††	1.6	0.433	†
Year 3	90.7	92.9	93.1	-2.4	0.330		-0.2	0.927		2.1	0.379	
Year 4	89.7	91.1	90.0	-0.3	0.900		1.1	0.683		1.5	0.595	
Year 5	86.9	87.7	86.3	0.5	0.866		1.4	0.658		0.8	0.786	
Year 6	82.1	85.3	83.0	-0.9	0.788		2.3	0.503		3.2	0.350	
Full period	99.5	99.7	97.9	1.6	* 0.078		1.7	* 0.058		0.1	0.895	
Number of months received Section 8 housing subsidy												
Year 1	11.7	11.8	11.6	0.1	0.395		0.2	0.192	†††	0.1	0.652	†
Year 2	11.1	11.3	11.3	-0.2	0.400		0.0	0.947		0.2	0.365	
Year 3	10.7	11.0	11.0	-0.2	0.466		0.1	0.770		0.3	0.309	
Year 4	10.7	10.7	10.7	0.0	0.999		0.1	0.828		0.1	0.830	
Year 5	10.0	10.4	10.2	-0.1	0.753		0.2	0.594		0.3	0.399	
Year 6	9.7	10.0	9.9	-0.2	0.662		0.1	0.840		0.3	0.524	
Full period	63.9	65.2	64.5	-0.6	0.708		0.7	0.687		1.3	0.439	

(continued)

Table 5.5 (continued)

Outcome	Average Outcome Levels			FSS-Only vs. Control			FSS+Incentives vs. Control			FSS+Incentives vs. FSS-Only		
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	.
Section 8 housing subsidy (HAP to owner)[a] ($)												
Year 1	10,187	10,307	10,064	123	0.612		243	0.316	†	120	0.622	
Year 2	10,219	10,197	10,001	218	0.496		196	0.540		-22	0.946	
Year 3	10,339	10,278	10,079	260	0.504		199	0.608		-61	0.876	
Year 4	10,610	10,044	10,365	245	0.579		-321	0.466		-566	0.201	
Year 5	10,229	10,283	10,346	-117	0.811		-63	0.898		54	0.912	
Year 6	9,979	9,888	10,046	-67	0.901		-158	0.768		-91	0.866	
Full period	61,563	60,998	60,902	662	0.750		96	0.963		-566	0.786	
Total Section 8 housing subsidy (Total HAP)[b] ($)												
Year 1	10,853	11,016	10,753	100	0.694		263	0.299	†	163	0.521	
Year 2	10,862	10,926	10,693	169	0.614		234	0.486		65	0.848	
Year 3	10,952	10,970	10,714	238	0.558		256	0.527		18	0.964	
Year 4	11,235	10,740	11,005	230	0.617		-265	0.565		-495	0.284	
Year 5	10,853	10,991	10,993	-140	0.785		-3	0.996		138	0.790	
Year 6	10,591	10,571	10,680	-89	0.875		-109	0.846		-20	0.971	
Full period	65,346	65,214	64,838	508	0.815		376	0.862		-132	0.952	
Sample size (total = 721)	237	241	243									

(continued)

Table 5.5 (continued)

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.	FSS+Incentives vs. FSS-Only: Difference (Impact)	FSS+Incentives vs. FSS-Only: P-Value	FSS+Incentives vs. FSS-Only: .
Head of household working at random assignment												
Received Section 8 housing subsidy (%)												
Year 1	98.1	98.1	98.5	-0.4	0.770		-0.4	0.755		0.0	0.979	
Year 2	96.1	92.5	98.0	-1.9	0.313		-5.5 ***	0.004	††	-3.6 *	0.055	†
Year 3	93.2	91.2	95.1	-1.9	0.389		-3.9 *	0.089		-2.0	0.383	
Year 4	91.2	88.2	91.4	-0.2	0.932		-3.3	0.224		-3.1	0.251	
Year 5	88.2	87.4	88.6	-0.4	0.897		-1.2	0.687		-0.8	0.779	
Year 6	84.9	84.4	86.2	-1.3	0.691		-1.8	0.584		-0.5	0.873	
Full period	98.1	98.1	98.5	-0.4	0.770		-0.4	0.755		0.0	0.979	
Number of months received Section 8 housing subsidy												
Year 1	11.6	11.3	11.7	-0.1	0.598		-0.5 **	0.017	†††	-0.4 *	0.059	†
Year 2	11.3	11.1	11.6	-0.2	0.302		-0.5 **	0.040		-0.3	0.288	
Year 3	11.0	10.7	11.3	-0.2	0.380		-0.5 *	0.065		-0.3	0.317	
Year 4	10.7	10.5	10.8	-0.1	0.682		-0.4	0.266		-0.2	0.471	
Year 5	10.4	10.3	10.5	-0.1	0.759		-0.1	0.701		0.0	0.932	
Year 6	10.1	10.0	9.9	0.1	0.757		0.1	0.879		-0.1	0.878	
Full period	65.1	63.9	65.8	-0.7	0.651		-1.9	0.229		-1.2	0.441	
Section 8 housing subsidy (HAP to owner)[a] ($)												
Year 1	9,858	9,394	9,795	63	0.816		-401	0.151	†	-465 *	0.092	
Year 2	10,074	9,355	9,799	275	0.403		-444	0.185		-719 **	0.030	
Year 3	10,148	9,400	9,825	322	0.397		-425	0.274		-747 *	0.052	
Year 4	10,271	9,676	10,053	218	0.605		-377	0.381		-595	0.162	
Year 5	10,300	9,833	10,320	-20	0.966		-488	0.308		-468	0.322	
Year 6	9,847	9,531	9,581	267	0.585		-50	0.921		-316	0.521	
Full period	60,498	57,188	59,373	1,125	0.590		-2,185	0.306		-3,310	0.116	

(continued)

Table 5.5 (continued)

Outcome	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.	FSS+Incentives vs. FSS-Only: Difference (Impact)	FSS+Incentives vs. FSS-Only: P-Value	FSS+Incentives vs. FSS-Only: Sig.
Total Section 8 housing subsidy (Total HAP)[b] ($)												
Year 1	10,596	10,142	10,587	9	0.975		-445	0.128	†	-454	0.116	
Year 2	10,814	10,115	10,595	219	0.520		-480	0.169		-699	0.042	**
Year 3	10,853	10,119	10,544	310	0.434		-425	0.294		-734	0.066	*
Year 4	10,993	10,405	10,771	221	0.616		-366	0.417		-587	0.187	
Year 5	11,037	10,585	11,046	-9	0.985		-461	0.356		-451	0.360	
Year 6	10,568	10,274	10,278	289	0.571		-5	0.992		-294	0.568	
Full period	64,861	61,640	63,821	1,039	0.634		-2,181	0.328		-3,220	0.144	
Sample size (total = 722)	251	232	239									

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Housing subsidy outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive housing subsidies.

HAP is Housing Assistance Payment.

[a]The measure reflects the housing subsidy paid by the housing agency to landlords. This amount excludes utility allowance payments made directly to tenants. A separate analysis of HPD data showed that in 98 percent of cases, the subsidy paid to the owner and total subsidy for a voucher household were exactly the same.

[b]The measure reflects the total housing subsidy paid by the housing agency to landlords and tenants.

Table 5.6

Six-Year Impacts on TANF/SNA, Food Stamps, and Housing Subsidy Payments With Confidence Intervals, FSS Study, Core Sample

Outcome ($)	FSS-Only vs. Control			FSS+Incentives vs. Control		
	Difference (Impact)	P-Value	90% Confidence Interval	Difference (Impact)	P-Value	90% Confidence Interval
Core sample						
TANF/SNA payments	-837	0.200	-1,910 to 236	-717	0.276	-1,801 to 366
Food stamp (SNAP) payments	-44	0.945	-1,090 to 1,002	-674	0.294	-1,731 to 382
Housing subsidy payments	904	0.555	-1,616 to 3,424	-1,103	0.476	-3,649 to 1,443
Head of household not working at baseline						
TANF/SNA payments	-1,517	0.181	-2,703 to -331	-1,340	0.236	-3,198 to 518
Food stamp (SNAP) payments	-378	0.668	-1,564 to 808	-1,236	0.161	-2,685 to 212
Housing subsidy payments	508	0.815	-3,067 to 4,083	376	0.862	-3,194 to 3,946
Head of household working at baseline						
TANF/SNA payments	-363	0.568	-1,550 to 825	-101	0.876	-1,168 to 966
Food stamp (SNAP) payments	440	0.633	-748 to 1,627	170	0.857	-1,378 to 1,718
Housing subsidy payments	1,039	0.634	-2,553 to 4,631	-2,181	0.328	-5,849 to 1,486

SOURCE: MDRC calculations using data from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The data cover housing records through June 30, 2015, and for 6 years after study entry for each sample member.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Housing subsidy outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive housing subsidies.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrution Assistance Program.

Conclusion

Considered over a full six-year follow-up period, the FSS programs produced a brief reduction in participants' TANF receipt that appears to be associated with FSS graduation requirements rather than with the earnings and employment gains experienced by those in the FSS+incentives program who were not working at random assignment. The programs did not lead to a decrease in housing voucher receipt or value, even for those who experienced employment and earnings gains. There are some reductions in SNAP receipt that are hard to interpret.

FSS was developed to reduce reliance on federal housing assistance and cash welfare benefits by improving participants' earnings and building their savings. As implemented at HPD as part of the Work Rewards demonstration, however, the FSS-only program did not produce statistically significant improvements in employment and earnings outcomes or consistent reductions in public benefits receipt. When combined with incentives for employment, it produced important but modest impacts for a subset of participants but still did not affect public benefits receipt. As noted in Chapter 4, some participants benefited from escrow disbursement, but the subgroups that benefited the most were not those that experienced employment and earnings impacts.

Chapter 6 presents an investigation of the benefits of the FSS-only and FSS+incentives programs to participants, to the government, and to society overall in relation to the costs of providing this intervention. The analysis encompasses factors that are not the subject of the impact analyses in Chapters 4 and 5, such as escrow payout. Furthermore, benefit-cost analysis includes a deeper investigation of the range of potential differences (statistically significant or not) that underlie the estimated differences presented in the impact tables. These differences will have implications for whether the FSS-only and FSS+incentives programs can be considered successful from varying perspectives.

Chapter 6

The Benefits and Costs of the Family Self-Sufficiency Program

The previous chapters in this report examine the experiences of the groups receiving the Family Self-Sufficiency program alone (FSS-only) and FSS plus the special work incentives (FSS+incentives), in addition to a control group, in terms of a broad range of outcomes and from a variety of analytic perspectives. This chapter offers a benefit-cost assessment of these programs, estimating the dollar value of the various outcome differences from the standpoints of (1) the families who engaged in the FSS-only and FSS+incentives programs (the program participants' perspective); (2) the government agencies whose budgets fund FSS programs (the taxpayer perspective); and (3) the general public (the societal perspective), which comprises the program group and taxpayers.

This systematic, multiperspective assessment of the outcomes values of the FSS program, as well as FSS with special cash incentives for work- and training-related activities, speaks to various questions and policy considerations. The assessment of the benefits and costs of the FSS-only program, gauged against the control group benchmark, is the first rigorous benefit-cost analysis of an FSS program.[1] The head-to-head comparison of the FSS+incentives and FSS-only program models isolates the value added to FSS by a modest incentive payment component.[2] The estimated net value of each intervention to families indicates whether the household heads of these families made wise decisions in volunteering for and then continuing to participate in FSS. The net value to taxpayers considers whether these programs are good public investments in terms of the extent to which the government eventually recoups its expenditures on the program, particularly through increased tax contributions from participants and reductions in transfer payments to them. The net value of FSS to society reflects, in effect, the contribution of the program to the gross national product GNP. It also indicates whether FSS adds more value — for families or taxpayers — than a pure transfer program such as Temporary Assistance for Needy Families (TANF) or Housing Choice Vouchers (HCVs).

For each outcome in the benefit-cost analysis, as well as for the bottom-line sums of pertinent benefits and costs, the dollar value is estimated as a regression-adjusted program-

[1]Santiago, Galster, and Smith (2017) conducted a benefit-cost assessment of an enhanced variant of the FSS program in Denver, Colorado.

[2]The incentive payments in Work Rewards were conditional cash transfers that tied cash rewards to maintaining full-time work or completing approved education and training activities.

control outcome difference. Statistical significance tests are used to assess the likelihood that the bottom-line estimates of the value of the interventions are different from zero, and sensitivity tests are employed to assess how these estimates change when key assumptions are modified. To provide a fuller assessment of the statistical uncertainty surrounding these estimates, the analysis provides 90 percent and 75 percent confidence intervals around the point estimates.

The findings of this analysis are as follows:

- Families in the FSS-only group, especially those in the nonworking subgroup,[3] are very likely to come out ahead financially within a 10-year period (although, because of statistical uncertainty, this conclusion is not firm).

- From the perspective of taxpayers, it appears likely (although not certain) that the FSS-only program at least breaks even during the 10-year period — that is, increases in tax payments by participating families and reductions in outlays for transfer benefits eventually offset government expenditures for the program. Again, this conclusion appears to be driven by program effects on the nonworking subgroup.

- Adding the result for taxpayers to the gain to families appears to leave net social value, but the value is not statistically significant.

- For the nonworking subgroup, the net financial gain to families appears to be enhanced with the use of incentive payments (or "reward payments") in the FSS+incentives program.[4] Confidence in the conclusion that the combined intervention produced a net economic gain for these families by the end of the six-year follow-up period is high, based on statistical tests. The 10-year estimates entail more uncertainty but still suggest that the net return for those families is positive. Moreover, it appears likely that taxpayers at least break even during that period, and that the overall return from the societal perspective is positive.

[3]The nonworking subgroup in Chapters 5 and 6 is defined by the self-reported work status of the head of household at the time of random assignment.

[4]Both the benefit-cost analysis and the impact analysis (reported in Chapters 4 and 5) indicate that the FSS+incentives program is not effective for sample members working at baseline. This is also the conclusion for FSS-only.

Estimating Benefits and Costs

The analytical framework is summarized in Table 6.1. The rows show outcomes discussed in Chapters 3, 4, and 5 — escrow, reward payments, earnings, TANF and Safety Net Assistance (SNA) payments, food stamp (Supplemental Nutrition Assistance Program, or SNAP) payments, and housing subsidies — and additional outcomes, such as fringe benefits and taxes, estimated by this study based on the primary outcomes. The columns show the analytical perspectives of families participating in FSS, government budgets (taxpayers), and society (the general public). The signs in the individual cells indicate whether the expected impact for a particular outcome is a benefit (plus sign) or a cost (minus sign), or neither (zero), from a given perspective. For example, earnings are a benefit to families, neither a benefit nor a cost to taxpayers, and a benefit to society (the families' gain is not offset by losses to others), while taxes on earnings are a loss to families, a gain to taxpayers, and neither a benefit nor a cost for society.

Some of the effects on outcomes shown in Table 6.1, such as earnings and reward payments, are measured in dollars. However, the effects on other outcomes need to be monetized, which is done using well-established methods.[5] Once all outcomes are expressed in dollars, the observed six-year outcomes are extended through 10 years by extrapolating observed outcome trends for the FSS-only, FSS+incentives, and control groups. This 10-year horizon captures both the complete cost of the investment in FSS, where program participation can last up to seven years,[6] and some of the longer-term return on the investment as families work toward self-sufficiency after completing the program. The following discussion of results begins with the observed six-year outcomes and then turns to the extrapolated 10-year outcomes.

All dollar values are discounted to reflect their value in 2016, so they can be added together to determine each program's net present value (NPV) — that is, total benefits minus total costs, expressed in 2016 dollars — from each analytical perspective. This is done using a real annual discount rate of 3.5 percent (as well as testing alternative discount rates), taking into account forgone investment as well as inflation.[7] These NPV estimates are the bottom-line conclusions of the analysis: *Positive NPVs indicate cost-effectiveness, and negative values denote ineffectiveness.*

[5]Long, Mallar, and Thornton. (2008).

[6]Seven years include the five covered by FSS participation contracts and two additional years for those sample members who received extensions.

[7]The inflation adjustments have been made using the GNP implicit price deflator. Two alternative discount rates, 0 percent and 5 percent, are used in the sensitivity testing discussed in Appendix B.

Table 6.1

Expected Value of Effects of FSS-Only and FSS+Incentives Programs on Measured Outcomes, by Accounting Perspective

Measured Outcomes	Expected Value of Program Effect on This Outcome		
	Participating Families	Government Budget	Society
Participation in FSS activities	0	-	-
Receipt of FSS escrow	+	-	0
Receipt of rewards payments (FSS+incentives)	+	0	+
Earnings	+	0	+
Fringe benefits	+	0	+
Tax payments	-	+	0
Tax credits	+	-	0
TANF/SNA payments	-	+	0
Food stamp (SNAP) payments	-	+	0
Housing subsidies	-	+	0
Public assistance administrative costs	0	+	+
Net present value of all program effects on outcomes	+ / -	+ / -	+ / -

NOTES: A "+" indicates an expected benefit, and a "-" indicates an expected cost. A zero indicates that the expected effect is neither a cost nor a benefit.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutritional Assistance Program.

The estimates of NPV are uncertain, in large part because of random error in the underlying impact estimates.[8] For dollar-denominated outcomes, the issue is the same as that addressed by the impact analysis presented in Chapters 4 and 5. For other outcomes, there is an additional consideration, which is the potential variability in the dollar value that this analysis

[8] Measurement errors can affect the accuracy of impact estimates. These errors are random when they are distributed throughout the sample in a random way (for example, through typos) and are not distributed systematically (for example, when they occur more frequently in one subgroup versus another).

attaches to each outcome unit. In reporting the statistical confidence intervals surrounding each dollar-value estimate, it is assumed that the same unit costs of FSS services and management, the same value of fringe benefits per dollar of earnings, and the same administrative costs of operating public assistance programs apply to all sample members. The NPV for each sample member is computed — from all three benefit-cost perspectives — allowing confidence intervals to be determined and statistical tests to be conducted for these bottom-line net values,[9] as done in previous research.[10] The information should help readers judge the results of the analysis. In addition, because the intervals have been determined and tests have been conducted in the same way they were for the impact analysis, the insights from the two analyses complement one another.

Other noteworthy sources of uncertainty are the extrapolation methods (discussed later in this chapter under "Estimating Effects in Years 7 Through 10") and discount rate. The NPV estimates were consequently subject to sensitivity tests, assessing the robustness of the estimates vis-à-vis alternative methods and rates.

Outcomes Observed for Years 1 Through 6

FSS and Reward Payment Activities

The first three outcomes in Table 6.1 are the ones associated with FSS program costs. As explained in earlier chapters, the control group members were not enrolled in FSS at the beginning of the study period but were free to enroll during the study; about 18 percent actually did participate during the study's six-year follow-up period. The assessment consequently attaches values to the differences in FSS outcomes between the groups, just as for the other outcomes.

FSS Program Participation

Participation in FSS program activities occurred at four community-based organizations (CBOs) — CAMBA, St. Nick's Alliance, Brooklyn Bronx Works, and Northern Manhattan Improvement Corporation — and LaGuardia Community College. Sample members' participa-

[9]The "net" in net present value has two meanings in a benefit-cost analysis based on a random assignment experiment: (1) benefits minus costs, and (2) program outcomes minus control outcomes. The net value for each sample member is benefits minus costs for that individual. The NPV of each FSS program is the regression-adjusted difference in these individual values between program and control group members.

[10]Long (1987) is a reanalysis of benefit-cost results for the youth subsample in the Supported Work Demonstration.

tion took place during a seven-year period following their random assignment, including five years covered by their FSS contracts and two additional years for those sample members whose contracts were extended.

The analysis uses three program participation outcomes measured with program participation data during the six-year follow-up period:

- **Participation milestones during the FSS contract period.** The key measure of participation in the FSS programs is months in which an individual achieved one milestone or more — that is, met program progress criteria that triggered Housing Preservation and Development (HPD) payments to the CBOs providing program services.[11] The average number of these milestone months is 47 for the FSS+incentives group, 34 for the FSS-only group, and 3 for the control group. Most participation is in the first three years after random assignment. (Detailed estimates on activities at the CBOs and LaGuardia Community College are provided in Appendix A.)

- **Contract extension.** Participants' program contracts could be extended in order for enrollment to last beyond five years.[12] As reported in Chapter 3, the contracts were extended for 18 percent of the FSS+incentives group and 18 percent of the FSS-only group, adding, on average, less than two milestone months of FSS participation for those heads of households. A small fraction of the contracts of control group members were extended. The amount of milestone months for sample members whose contracts were extended was estimated based on their participation in Year 5 and program graduation data.

- **Reward payments receipt.** FSS+incentives group members were eligible to receive reward payments for maintaining full-time work and for completing approved education and work-related training classes during their first two years of participation. The FSS-only and control groups were not eligible for the payments.

These participation outcomes are assigned dollar values using the pertinent unit cost estimates that are described below. Before turning to these estimates, however, three attrib-

[11]There are 13 milestones, including needs assessment, case management contact, family-based support services participation, financial literacy class attendance, referrals to benefits or work supports, credit improvement, started employment, continued employment (30/90/180 days), job promotion, began education or training, and General Educational Development (GED) or other certification.

[12]A participating family could extend its FSS Contract of Participation by making a written request providing "good cause" reasons for an extension, such as an illness or loss of employment.

utes of the participation outcomes should be noted. First, the outcomes for participation milestone months and contract extensions measure generic participation, counting all months in which program milestones are recorded.[13] They do not distinguish between different levels of participation intensity. Second, overall program participation by the FSS+incentives group exceeded that of the FSS-only group. The difference was substantial, consistent with earlier evaluation findings of statistically significant differences between the groups in several key participation outcome measures.[14] The key difference — in participation during Years 1 through 3 after random assignment — indicates that the reward payments worked as expected. And third, the average number of milestone months for the working subgroup surpassed that of the nonworking subgroup. The average number for nonworking sample members assigned to the FSS+incentives group was six fewer than for the working sample members, and for nonworkers assigned to the FSS-only program about 12 fewer than for the working-at-baseline subgroup.[15] This is not surprising, given that the sample members who already held a job at the point of random assignment had demonstrated a commitment to working. However, the additional participation means that benefits would have to be larger to offset higher program operating costs for the working subgroup.

Costs of Program Participation

The unit costs of FSS activities, expressed in 2016 dollars, are about $461 per milestone month in Years 1 through 3 after random assignment, when activities were delivered mostly by the CBOs. The unit costs are similar — between $445 and $473, depending on the group — in the later years of follow-up, when the activities were provided by both the CBOs and LaGuardia Community College.[16] (See Appendix Table A.7 for detailed estimates.)

The program expenditures in the numerator of each of these unit cost estimates correspond to the milestone payments made by HPD (under the terms of FSS performance-based contracts) to the CBOs and LaGuardia Community College,[17] and the participants counted in

[13]Program participation, including achievement of program milestones, is discussed in detail in Verma et al. (2012) and Nuñez, Verma, and Yang (2015a).

[14]Nuñez, Verma, and Yang (2015a).

[15]See Appendix B.

[16]During Years 1 to 3, LaGuardia provided services to control group members and to nondemonstration families under an existing agreement with HPD, while the CBOs had contracts to provide services to FSS-only and FSS+incentives families as part of the Work Rewards demonstration.

[17]As explained in Appendix B, the costs of initial training, carrying out the random assignment experiment, and early operations (when the programs were operated on a small scale) have been excluded from the expenditures in the numerator of the unit cost calculation. These costs would not be incurred by an ongoing program and consequently are excluded from the benefit-cost assessment.

the denominator are measured using FSS milestones data.[18] Multiplied by the milestone-month outcomes, they yield estimates of program operations costs per family for each research group; see Appendix Table A.7 for a breakdown of participation by program phase.

These program activities account for most of the costs of FSS program participation. One of the others is the cost of operating the FSS escrow component, about $100 per year. This expenditure covers the HPD staff time needed to discuss escrow with families and administer the system itself, but it does not include the expense of funding the escrow, which is treated separately, as discussed below. Another cost is that incurred by Seedco in administering the incentive payments for the FSS+incentives group — $985 per group member. Again, the costs of the payments themselves are handled separately because they are transfers to participating families.

Additional costs were incurred by HPD for program management. HPD was responsible for the administration of FSS activities and the operation of the escrow system. Complicating matters for this analysis, HPD was also responsible for helping all voucher holders (including FSS households that were not part of the Work Rewards demonstration) cope with a range of employment, public assistance, and other issues, and for making important institutional transitions (including outsourcing most FSS program functions to the CBOs and LaGuardia Community College) during the same period that the FSS-only and FSS+incentives programs operated. As a result, HPD costs associated with FSS escrow, the oversight of CBO and LaGuardia Community College contracts, and other FSS management activities — which together constitute the costs of FSS program management — were isolated for the study's core sample households. The remaining HPD costs, which cover non-study activities as well as FSS program development activities, such as program design, instituting program participation milestones, and training CBOs, are excluded from the calculation of program management unit costs.[19]

The unit costs are multiplied by the milestone-months outcomes to determine costs per sample member. The total costs of participation in the FSS-only and FSS+incentives programs, as well as control group participation in FSS, include all of these elements. Table 6.2 summarizes the gross costs for these three groups as well as the net costs of the FSS-only program (FSS-only minus control group costs) and the FSS+incentives program (FSS+incentives minus control group costs).

[18]See Appendix B for a discussion.

[19]See Appendix B.

Table 6.2

Estimated Gross and Net Costs per Family (in 2016 Dollars), FSS-Only and FSS+Incentives

Component ($)	FSS Only	FSS+ Incentives	Control Group	Net Cost: FSS Only vs. Control	Net Cost: FSS+Incentives vs. Control
FSS escrow disbursements	1,431	2,016	360	1,071	1,656
Program management[a]	819	800	83	736	717
Program operations[b]	1,394	1,886	161	1,233	1,725
Reward payments	0	988	0	0	988
Reward payment administration[c]	0	985	0	0	985
Total gross and net costs	3,644	6,675	604	3,040	6,071

SOURCE: MDRC calculations using FSS milestones database, the New York City Department of Housing Preservation and Development (HPD) administrative cost data, and Seedco's program data and administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation. Tests of statistical significance were not performed.

[a]Includes general management and oversight of the FSS program by HPD, which includes assisting clients and community-based organization (CBO) staff with FSS questions and sending annual escrow account statements to clients. Also includes all FSS-related activities performed by Seedco, which includes overseeing the CBOs (holding management meetings, developing management reports, conducting site visits, providing technical assistance to CBOs) and reviewing and processing payments to the CBOs. This also included hiring case managers and job developers to work at CBOs; however, this was only for a brief period of time.

[b]Includes all FSS-related activities performed by the CBOs and LaGuardia, which includes holding program orientations, meeting with clients to complete a needs assessment and career plan, and providing ongoing case management and workforce development. In the first part of the program, services from the CBOs were only available to the FSS-only and FSS+incentives groups, and services from LaGuardia were only available to regular FSS clients. Later in the program, all FSS clients were allowed to get services from the CBOs or LaGuardia.

[c]Includes all rewards payment activities performed by Seedco, which includes creating coupon books for reward payments, verifying requirements for rewards were met, maintaining up-to-date bank account information to make sure payments are disbursed to the correct accounts, issuing "earnings statements" each payment period to mail to sample members, creating and maintaining a helpline to answer sample member questions, making payments to sample members who earned rewards, sending mailings to sample members about program rule changes, maintaining a marketing program, offering general program management, and providing oversight of CBOs. Also includes all rewards payment activities performed by the CBOs, which includes program orientations, refresher sessions, coupon book distribution, customer service, social events, and workshops.

Not surprisingly, the administrative expenses for FSS+incentives reward payments and the oversight of the CBO contracts are high in relation to comparable costs in established public benefits and service programs.[20] Such administrative activities are often expensive when they involve new programs, policy innovations, changes in agency procedures, or small-scale program operations. However, if the FSS-only or FSS+incentives programs were operated as ongoing programs, these unit costs might well be lower.

FSS Escrow and Incentive Payment Costs

Next on the list of outcomes in Table 6.1 are the FSS escrow and reward payment expenditures, measured using HPD and Seedco records. FSS escrow expenses were handled separately from other FSS costs by HPD, and reward payment expenses were shouldered by the Mayor's Office for Economic Opportunity — but they are nonetheless costs from a budget (taxpayer) perspective. The cost of escrow, accumulated in individual accounts through the time participants graduated from the program, was not incurred until escrow was disbursed. As shown in Table 6.2, the cost of escrow through Year 6 was $1,431 for the FSS-only group and $2,016 for the FSS+incentives group. The escrow cost for the control group was $360. (As noted earlier, a small fraction of control group members participated in the FSS-only program.) From the government budget perspective, these costs are about the same size as the operating costs of the program. From the perspective of families, the escrow represents the second most important benefit of program participation after increased earnings.

The cost of the reward payments to the FSS+incentives group was $988 per family — about half the size of the escrow cost for the group. The payments were made during the first two years families participated in the FSS programs. The cost of the payments raised the total net cost of the FSS+incentives program in Years 1 through 6 to $6,071 per family, compared with the total net cost of $3,040 for the FSS-only program.

Earnings and Related Outcomes

The next four outcomes in Table 6.1 are earnings and earnings-driven outcomes, the value of which depends on the perspective taken. The FSS-only and FSS+incentives programs are hypothesized to have impacts on the employment and earnings of participating families, which are an important benefit to them. The program-control differences discussed in Chapter 5 are generally consistent with this expectation, but only the first-year differences in employment

[20]For example, the cap on administrative costs (as a fraction of total costs) is 15 percent for TANF (which provides both cash assistance and services) and 20 percent for Community Development Block Grants (an economic development block grant). The actual administrative costs are usually below this cap.

were found to be statistically significant impacts for the full sample. Still, these differences are best estimates of program effects. The program effects on earnings do not affect government budgets, but resulting taxes and tax credits are important. The earnings indicate increased output in the economy, assuming there is no displacement (discussed below).

Effects on Overall Earnings and Fringe Benefits

There are two noteworthy differences in the earnings effects reported here from the ones presented in Chapter 4. One is that this analysis looks at the earnings of households,[21] not just family heads. The results are similar but not the same. The other distinction is that the measured program-control differences are discounted to reflect 2016 dollars.

The observed differences in household earnings cover six years following random assignment to the FSS-only, FSS+incentives, and control groups. Estimates of these differences are shown in Tables 6.3 and 6.4. The difference for the FSS-only group is $2,685 (well within the ±$5,000 confidence range), or about $450 per year. The measured difference for the FSS+incentives group, $1,956, is smaller, but in a similar range.

The compensation from the employment of sample members comprises fringe benefits, including legally required benefits (notably under FICA, the Federal Insurance Contributions Act), employer-paid health and life insurance, and retirement contributions. Based on federal data, these benefits are estimated as a percentage of measured earnings.[22] The resulting estimate of the program-control difference in fringe benefits for the FSS-only group, $569 per sample member, lifts the overall compensation gain from employment for that group above $3,200. The estimated difference in fringe benefits for the FSS+incentives group, $414 per family, results in an overall compensation gain of nearly $2,400.

Several potentially important benefits and costs associated with the employment effects of the FSS-only and FSS+incentives programs cannot be measured. In particular, if demand for labor is relatively fixed, employment of sample members may result in the displacement of other workers, producing a loss for taxpayers (who, by definition, include the displaced workers).

Effects on Earnings and Fringe Benefits of the Nonworking Subgroup

The FSS-only and FSS+incentives programs both have greater effects on the employment and earnings of nonworking sample members than on those of their working counterparts,

[21]Only household members who agreed to be in the demonstration are part of this earnings calculation. Household members, and the employment of these members, could change during the follow-up period.

[22]Fringe benefits are estimated based on the employee benefits survey conducted by the U.S. Bureau of Labor Statistics (2010).

Table 6.3

Six-Year Estimated Financial Effects, by Accounting Perspective (in 2016 Dollars)

	Program Group		Government Budget		Social		
Component ($)	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	P-Value
Financial effects of FSS-only							
Household earnings	2,685	-2,359 to 7,728	0	--	2,685	-2,359 to 7,728	0.381
Fringe benefits[a]	569	-500 to 1,637	0	--	569	-500 to 1,637	0.381
Tax payments[b]	-162	--	329	-1,229 to 1,887	167	-1,326 to 1,661	0.829
Tax credits[c]	1,214	131 to 2,298	-1,214	-2,298 to -131	0	--	0.066
TANF/SNA payments	-916	-1,930 to 99	916	-99 to 1,930	0	--	0.138
Food stamp (SNAP) payments	-43	-1,034 to 949	43	-949 to 1,034	0	--	0.944
Housing subsidy	833	-1,556 to 3,223	-833	-3,223 to 1,556	0	--	0.566
Public assistance administration[d]	0	--	25	-311 to 362	25	-311 to 362	0.901
FSS escrow	1,071	694 to 1,448	-1,071	-1,448 to -694	0	--	0.000
Operating costs	0	--	-2,736	-3,065 to -2,407	-2,736	-3,065 to -2,407	0.000
Financial effects of FSS+incentives							
Household earnings	1,956	-3,139 to 7,051	0	--	1,956	-3,139 to 7,051	0.528
Fringe benefits[a]	414	-665 to 1,493	0	--	414	-665 to 1,493	0.528
Tax payments[b]	556	-685 to 2,066	672	-902 to 2,247	1,229	-346 to 2,803	0.461
Tax credits[c]	-317	-1,411 to 778	317	-778 to 1,411	0	--	0.634
TANF/SNA payments	-834	-1,859 to 191	834	-191 to 1,859	0	--	0.181
Food stamp (SNAP) payments	-637	-1,639 to 365	637	-365 to 1,639	0	--	0.296
Housing subsidy	-1,246	-3,660 to 1,168	1,246	-1,168 to 3,660	0	--	0.396
Public assistance administration[d]	0	--	290	-49 to 630	290	-49 to 630	0.160
FSS escrow	1,656	1,275 to 2,038	-1,656	-2,038 to -1,275	0	--	0.000
Reward payments	971	887 to 1,056	-971	-1,056 to -887	0	--	0.000
Operating costs	0	--	-4,672	-5,004 to -4,339	-4,672	-5,004 to -4,339	0.000

(continued)

Table 6.3 (continued)

SOURCES: MDRC calculations from the New York City Human Resources Administration (HRA) public assistance records, New York State Department of Labor (NYSDOL) unemployment insurance (UI) earnings, housing subsidy and FSS disbursement data from the New York City Department of Housing Preservation and Development (HPD), and published data on tax rates and employee fringe benefits. Program costs are based on MDRC calculations using FSS milestones database, HPD's administrative cost data, and Seedco's administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

[a]These include employer-paid health and life insurance, pension contributions, and worker's compensation. Paid leave is captured directly by the earnings estimate. Employee-paid Social Security and Medicare taxes are included as tax payments.

[b]Tax payments include federal and state income taxes, sales tax, and employee-paid Social Security and Medicare taxes. The government budget perspective includes employer-paid Social Security and Medicare taxes.

[c]Tax credits include federal and state earned income credits, the federal child tax credit, the federal additional child tax credit, and New York State and City child tax credits.

[d]Public assistance administration includes costs to administer TANF payments, food stamps, and housing subsidies.

and this key result of the impact analysis is also important to the benefit-cost analysis. The household earnings of the FSS-only group are estimated to be $5,246 higher than those of the control group over the six-year follow-up period (as shown in Table 6.4). The estimated program-control difference in fringe benefits boosted the employment compensation gain for FSS-only families to nearly $6,400 — that is, additional remuneration of more than $1,000 per year.

The labor market progress of families assigned to the FSS+incentives group is even greater. The average estimated household earnings gain for FSS+incentives families is $7,790, and this six-year difference is statistically significant. The estimated program-control difference in fringe benefits (also statistically significant) lifted the total compensation gain above $9,400.

Another way to look at these results is to consider that all of the core sample's gain from earnings and fringe benefits goes to families without workers at baseline, roughly half of the sample. Indeed, for the FSS+incentives program, the large boosts in earnings and benefits for nonworking families — which were statistically significant — contrast with compensation losses for their working-at-baseline counterparts.

Table 6.4

Six-Year Estimated Financial Effects, by Accounting Perspective (in 2016 Dollars), Head of Household Not Working at the Time of Random Assignment

	Program Group		Government Budget		Social		
Component ($)	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	P-Value
Financial effects of FSS-only							
Household earnings	5,246	-1,040 to 11,533	0	--	5,246	-1,040 to 11,533	0.170
Fringe benefits[a]	1,111	-220 to 2,443	0	--	1,111	-220 to 2,443	0.170
Tax payments[b]	-830	--	1,174	-613 to 2,961	344	-1,030 to 1,719	0.321
Tax credits[c]	725	-299 to 1,750	-725	-1,750 to 299	0	--	0.244
TANF/SNA payments	-1,705	-3,455 to 46	1,705	-46 to 3,455	0	--	0.110
Food stamp (SNAP) payments	-472	-1,848 to 904	472	-904 to 1,848	0	--	0.573
Housing subsidy	478	-2,901 to 3,858	-478	-3,858 to 2,901	0	--	0.816
Public assistance administration[d]	0	--	204	-289 to 697	204	-289 to 697	0.497
FSS escrow	610	65 to 1,155	-610	-1,155 to -65	0	--	0.066
Operating costs	0	--	-2,526	-2,985 to -2,067	-2,526	-2,985 to -2,067	0.000
Financial effects of FSS+incentives							
Household earnings	7,790	1,515 to 14,066	0	--	7,790	1,515 to 14,066	0.042
Fringe benefits[a]	1,650	321 to 2,979	0	--	1,650	321 to 2,979	0.042
Tax payments[b]	1,139	-233 to 2,511	1,641	-143 to 3,425	2,780	996 to 4,564	0.173
Tax credits[c]	1,274	252 to 2,297	-1,274	-2,297 to -252	0	--	0.041
TANF/SNA payments	-1,577	-3,325 to 170	1,577	-170 to 3,325	0	--	0.138
Food stamp (SNAP) payments	-1,300	-2,674 to 73	1,300	-73 to 2,674	0	--	0.120
Housing subsidy	152	-3,222 to 3,526	-152	-3,526 to 3,222	0	--	0.941
Public assistance administration[d]	0	--	372	-120 to 864	372	-120 to 864	0.214
FSS escrow	1,338	794 to 1,882	-1,338	-1,882 to -794	0	--	0.000
Reward payments	458	368 to 548	-458	-548 to -368	0	--	0.000
Operating costs	0	--	-4,113	-4,571 to -3,655	-4,113	-4,571 to -3,655	0.000

(continued)

Table 6.4 (continued)

SOURCES: MDRC calculations from the New York City Human Resources Administration (HRA) public assistance records, New York State Department of Labor (NYSDOL) unemployment insurance (UI) earnings, housing subsidy and FSS disbursement data from the New York City Department of Housing Preservation and Development (HPD), and published data on tax rates and employee fringe benefits. Program costs are based on MDRC calculations using FSS milestones database, HPD's administrative cost data, and Seedco's administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

[a]These include employer-paid health and life insurance, pension contributions, and worker's compensation. Paid leave is captured directly by the earnings estimate. Employee-paid Social Security and Medicare taxes are included as tax payments.

[b]Tax payments include federal and state income taxes, sales tax, and employee-paid Social Security and Medicare taxes. The government budget perspective includes employer-paid Social Security and Medicare taxes.

[c]Tax credits include federal and state earned income credits, the federal child tax credit, the federal additional child tax credit, and New York State and City child tax credits.

[d]Public assistance administration includes costs to administer TANF payments, food stamps, and housing subsidies.

Tax Payments and Credits

The next two outcomes listed in Table 6.1, tax payments and tax credits, are estimated for each sample member based on measured differences in earnings and public assistance. (The latter is discussed in the following section.) With a few exceptions, applicable U.S. and New York tax rules and rates for the 2009 tax year are used.[23] The earned income and family tax credits are shown separately from the tax payments, because in cases where the credits exceed the taxes due, families receive credit payments from the Internal Revenue Service and New York State and New York City tax authorities.

Tables 6.3 and 6.4 provide estimates of program-control group differences in tax payments and credits for the core sample over the six-year follow-up period. The tax results indicate losses for FSS-only households and gains for FSS+incentives households. The loss to the FSS-only group is far outweighed by tax credits — more than $1,200 in all — while the

[23]For details, see Appendix B.

FSS+incentives group earned less in credits than the control group, offsetting only part of its tax losses.

Table 6.4 shows the six-year effects on tax payments and credits for the nonworking subgroup. Both the FSS-only and FSS+incentives sample members paid about one-sixth of their earnings gains in taxes. With the credits, the FSS-only group recovered most of its losses to tax payments. The FSS+incentives group received more in tax credits than it paid in taxes (and the impact on child tax credits was statistically significant).

Public Benefits Outcomes

Because the FSS-only and FSS+incentives programs are expected to increase the employment and earnings of participating families, reductions in public benefits, including TANF, food stamps (SNAP), and Housing Choice Voucher (HCV) payments, were anticipated. As explained in Chapter 5, the program effects are largely consistent with these expectations, but few of the effects for the full sample are statistically significant.

Over the six-year follow-up period, the measured program-control differences indicate that FSS-only families received $916 and $43 less than control group families in TANF and SNA benefits, respectively. This is more than a 10 percent reduction in public assistance for the core sample, a substantial loss, but the measured differences are insignificant. The difference in TANF benefits for FSS+incentives families is smaller, but the reduction in SNA benefits is larger; neither difference is significant.

The effects of the programs on the benefits of nonworking families appear to be larger. Over the six years, FSS-only families received an estimated $1,705 less in TANF benefits and $472 less in SNAP benefits than the control group did. The FSS+incentives families received $1,577 less in TANF benefits than the control group and $1,300 less in SNAP benefits. Despite the large program-control group differences in benefits over the six years of follow-up, neither impact is statistically significant.

Housing Assistance

Despite increasing household earnings, albeit insignificantly, the FSS-only program generates a positive program-control difference in housing assistance payments. As shown in Table 6.3, the difference, $833, is not significant. The experience of the FSS+incentives group is more consistent with expectations: The measured difference suggests that assistance declined by $1,246. The measured differences for the nonworking subgroup are smaller and statistically insignificant.

In sum, the analysis of benefits and costs in the first six years of follow-up has the following key results: From the perspective of participating families, household earnings increased — an increase that went entirely to households in the nonworking subgroup. Some of this gain appears to be offset by taxes and losses in public benefits. From the standpoint of taxpayers, program costs seem to be partly offset by corresponding tax revenue and benefit savings. These offsets appear to be more substantial for the nonworking subgroup, but again, statistical tests do not confirm the contribution. From the perspective of society, the gains to families look larger than the losses to taxpayers, but the difference is within the margin of error. Thus, the cost-effectiveness of both versions of FSS is unclear — much like the impact analysis, which was inconclusive after six years of follow-up. The judgment of the benefit-cost analysis depends on the nonworking subgroup and how they do in Years 7 through 10, discussed next, after all participants have left the programs.

Estimating Effects for Years 7 Through 10

The experiences of families in Years 7 through 10 after random assignment were not observed, but they are important to this analysis. Outcomes for these years are estimated based on the measured outcomes for the FSS-only, FSS+incentives, and control groups in Year 6. For one set of outcomes (program participation), the estimates are firm, while for the remaining outcomes, the estimates are less certain.

The estimates covering Years 7 through 10 allow the benefit-cost analysis to reach conclusions based on a 10-year horizon. This stretch of time captures the complete cost of the investment in FSS, where program participation can last up to seven years — that is, five years covered by participants' FSS contracts and two additional years for those sample members who receive extensions. It also identifies some of the longer-term return on the investment as families work toward self-sufficiency after completing the program.

Costs of FSS Activities

For the first group of outcomes — the costs of program participation — only Year 7 is pertinent, because participation contracts can only be extended two years beyond the standard five years. Year 7 enrollment rates are estimated by adjusting the observed Year 6 rates for recorded program graduations by the end of Year 6. The unit costs are assumed to be the same (in constant 2016 dollars) as for Year 6.

The resulting estimates of Year 7 costs, which are small, are included in the 10-year estimates of program benefits and costs in Tables 6.5 and 6.6. The estimates are subject to

Table 6.5

Ten-Year Estimated Financial Effects, by Accounting Perspective (in 2016 Dollars)

	Program Group		Government Budget		Social		
Component ($)	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	P-Value
Financial effects of FSS-only							
Household earnings	3,930	-4,880 to 12,739	0	--	3,930	-4,880 to 12,739	0.463
Fringe benefits[a]	115	-143 to 373	0	--	115	-143 to 373	0.463
Tax payments[b]	-292	--	552	-2,322 to 3,426	260	-2,615 to 3,134	0.831
Tax credits[c]	1,672	-106 to 3,450	-1,672	-3,450 to 106	0	--	0.122
TANF/SNA payments	-1,232	-2,880 to 415	1,232	-415 to 2,880	0	--	0.219
Food stamp (SNAP) payments	-210	-1,823 to 1,402	210	-1,402 to 1,823	0	--	0.830
Housing subsidy	1,061	-3,067 to 5,189	-1,061	-5,189 to 3,067	0	--	0.673
Public assistance administration[d]	0	--	67	-502 to 636	67	-502 to 636	0.846
FSS escrow	1,071	694 to 1,448	-1,071	-1,448 to -694	0	--	0.000
Operating costs	0	--	-2,811	-3,146 to -2,475	-2,811	-3,146 to -2,475	0.000
Financial effects of FSS+incentives							
Household earnings	1,339	-7,560 to 10,239	0	--	1,339	-7,560 to 10,239	0.805
Fringe benefits[a]	39	-221 to 300	0	--	39	-221 to 300	0.805
Tax payments[b]	801	-1,479 to 3,080	870	-2,034 to 3,773	1,670	-1,233 to 4,574	0.563
Tax credits[c]	-720	-2,516 to 1,076	720	-1,076 to 2,516	0	--	0.510
TANF/SNA payments	-1,027	-2,692 to 637	1,027	-637 to 2,692	0	--	0.310
Food stamp (SNAP) payments	-932	-2,561 to 697	932	-697 to 2,561	0	--	0.347
Housing subsidy	-1,657	-5,827 to 2,514	1,657	-2,514 to 5,827	0	--	0.514
Public assistance administration[d]	0	--	395	-180 to 969	395	-180 to 969	0.259
FSS escrow	1,656	1,275 to 2,038	-1,656	-2,038 to -1,275	0	--	0.000
Reward payments	971	887 to 1,056	-971	-1,056 to -887	0	--	0.000
Operating costs	0	--	-4,752	-5,091 to -4,413	-4,752	-5,091 to -4,413	0.000

(continued)

Table 6.5 (continued)

SOURCES: MDRC calculations from the New York City Human Resources Administration (HRA) public assistance records, New York State Department of Labor (NYSDOL) unemployment insurance (UI) earnings, housing subsidy and FSS disbursement data from the New York City Department of Housing Preservation and Development (HPD), and published data on tax rates and employee fringe benefits. Program costs are based on MDRC calculations using FSS milestones database, HPD's administrative cost data, and Seedco's administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

[a]These include employer-paid health and life insurance, pension contributions, and worker's compensation. Paid leave is captured directly by the earnings estimate. Employee-paid Social Security and Medicare taxes are included as tax payments.

[b]Tax payments include federal and state income taxes, sales tax, and employee-paid Social Security and Medicare taxes. The government budget perspective includes employer-paid Social Security and Medicare taxes.

[c]Tax credits include federal and state earned income credits, the federal child tax credit, the federal additional child tax credit, and New York State and City child tax credits.

[d]Public assistance administration includes costs to administer TANF payments, food stamps, and housing subsidies.

uncertainty, but not much, because most sample members could not have participated in Year 7, and those who could were limited in the program activities in which they could be engaged.

Earnings and Related Outcomes

For the other two categories of outcomes — those related to earnings and public benefits — program effects are extrapolated by extending the levels and patterns measured for quarterly earnings of the FSS-only, FSS+incentives, and control groups during the last year of the follow-up period. For most program group members, these four quarters occurred after their participation in the FSS programs. They consequently provide the best base period for extrapolation of outcomes beyond the follow-up years. The earnings trend in Year 6 was stable (not shown), and available evidence suggests it is reasonable to assume the trend would continue.[24]

[24]See, for example, Jacob and Ludwig (2012), who followed earnings and public assistance outcomes over eight years for a large sample of Section 8 voucher recipients and Section 8 applicants who did not receive vouchers.

Table 6.6

Ten-Year Estimated Financial Effects, by Accounting Perspective (in 2016 Dollars), Head of Household Not Working at the Time of Random Assignment

	Program Group		Government Budget		Social		
Component ($)	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	Point Estimate	90% Confidence Interval	P-Value
Financial effects of FSS-only							
Household earnings	8,320	-2,766 to 19,406	0	--	8,320	-2,766 to 19,406	0.217
Fringe benefits[a]	244	-81 to 568	0	--	244	-81 to 568	0.217
Tax payments[b]	-1,539	--	2,114	-1,246 to 5,475	575	-2,785 to 3,935	0.327
Tax credits[c]	769	-1,053 to 2,590	-769	-2,590 to 1,053	0	--	0.488
TANF/SNA payments	-2,185	-5,035 to 665	2,185	-665 to 5,035	0	--	0.208
Food stamp (SNAP) payments	-1,190	-3,437 to 1,056	1,190	-1,056 to 3,437	0	--	0.384
Housing subsidy	204	-5,750 to 6,158	-204	-6,158 to 5,750	0	--	0.955
Public assistance administration[d]	0	--	402	-443 to 1,247	402	-443 to 1,247	0.434
FSS escrow	610	65 to 1,155	-610	-1,155 to -65	0	--	0.066
Operating costs	0	--	-2,595	-3,064 to -2,127	-2,595	-3,064 to -2,127	0.000
Financial effects of FSS+incentives							
Household earnings	10,462	-605 to 21,528	0	--	10,462	-605 to 21,528	0.120
Fringe benefits[a]	306	-18 to 630	0	--	306	-18 to 630	0.120
Tax payments[b]	1,752	-825 to 4,328	2,455	-899 to 5,809	4,207	852 to 7,561	0.264
Tax credits[c]	1,757	-62 to 3,575	-1,757	-3,575 to 62	0	--	0.113
TANF/SNA payments	-1,856	-4,702 to 989	1,856	-989 to 4,702	0	--	0.284
Food stamp (SNAP) payments	-2,081	-4,323 to 161	2,081	-161 to 4,323	0	--	0.127
Housing subsidy	-404	-6,348 to 5,540	404	-5,540 to 6,348	0	--	0.911
Public assistance administration[d]	0	--	586	-257 to 1,430	586	-257 to 1,430	0.253
FSS escrow	1,338	794 to 1,882	-1,338	-1,882 to -794	0	--	0.000
Reward payments	458	368 to 548	-458	-548 to -368	0	--	0.000
Operating costs	0	--	-4,193	-4,661 to -3,725	-4,193	-4,661 to -3,725	0.000

(continued)

Table 6.6 (continued)

SOURCES: MDRC calculations from the New York City Human Resources Administration (HRA) public assistance records, New York State Department of Labor (NYSDOL) unemployment insurance (UI) earnings, housing subsidy and FSS disbursement data from the New York City Department of Housing Preservation and Development (HPD), and published data on tax rates and employee fringe benefits. Program costs are based on MDRC calculations using FSS milestones database, HPD's administrative cost data, and Seedco's administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

[a]These include employer-paid health and life insurance, pension contributions, and worker's compensation. Paid leave is captured directly by the earnings estimate. Employee-paid Social Security and Medicare taxes are included as tax payments.

[b]Tax payments include federal and state income taxes, sales tax, and employee-paid Social Security and Medicare taxes. The government budget perspective includes employer-paid Social Security and Medicare taxes.

[c]Tax credits include federal and state earned income credits, the federal child tax credit, the federal additional child tax credit, and New York State and City child tax credits.

[d]Public assistance administration includes costs to administer TANF payments, food stamps, and housing subsidies.

Estimates of the program-control differences in household earnings in Years 7 through 10 are shown in Box 6.1 alongside the measured earnings differences in Years 1 through 6. For the FSS-only program, the extrapolated earnings ($1,245) add about 50 percent to the measured program-control earnings difference ($2,685) for the core sample. The extrapolated earnings for the nonworking subgroup in the FSS-only program, about $3,100, add more than 50 percent to the measured earnings effect (not shown).

The extrapolated earnings for the FSS+incentives program are negative, reflecting the trend during the last four quarters of follow-up. This reduces the estimated 10-year program effect for the core sample to about $1,300. In sharp contrast, the extrapolated earnings for the nonworking subgroup added more than $8,000 to measured earnings, generating a total gain of about $10,500. This indicates, of course, that the extrapolated earnings for sample members working at baseline are decidedly negative. This is consistent with the observed trend in the sixth year of follow-up, but it is puzzling nonetheless.

These estimates of earnings differences in Years 7 through 10 are included in the 10-year results in Tables 6.5 and 6.6. Extrapolated program effects on fringe benefits, tax pay-

Box 6.1

Estimated Program-Control Differences in Household Earnings and Public Assistance Payments in 2016 Dollars

The benefit-cost analysis used observed payments to study participants through Year 6 to estimate program-control differences in household earnings amounts and public assistance receipt amounts. Estimates in Years 7 through 10 were projected to allow the benefit-cost analysis to reach conclusions based on a 10-year horizon, in order to capture the complete cost of the investment in FSS, where program participation can last up to seven years (five years covered by participants' FSS contracts and two additional years for those sample members who receive extensions). It also identifies some of the longer-term return on the investment as families work toward self-sufficiency after completing the program.

The table below shows estimates of program-control differences in household earnings and public assistance payments in Years 7 through 10 alongside the measured differences in Years 1 through 6. The total column shows the 10-year estimates of the program and control group differences, which combines the measured and projected differences.

	Estimated Program-Control Difference		
Group	Years 1-6	Years 7-10	Total
Household earnings			
FSS-only	$2,685	$1,245	$3,930
FSS+incentives	$1,956	-$617	$1,339
TANF/SNA and food stamp (SNAP) payments			
FSS-only	-$916	-$316	-$1,232
FSS+incentives	-$834	-$193	-$1,027

NOTE: TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance. SNAP is Supplemental Nutrition Assistance Program.

ments, and tax credits, which are also included in the 10-year estimates, do not necessarily move in the same direction as extrapolated earnings. For example, increased earnings raise payroll tax payments but can increase or reduce a child tax credit.

Public Benefits Outcomes

Estimates of the program-control differences in TANF and SNA payments in Years 7 through 10 are shown in Box 6.1 next to the measured differences in these payments during Years 1 through 6. For the FSS-only program, the extrapolated payment reductions increase the total program-control difference by about 35 percent. The extrapolated reduction for the FSS+incentives group is about two thirds that of the FSS-only reduction, but it changes the total estimated reduction in TANF and SNA payments proportionately less.

The extrapolated reductions in these public assistance payments are similar in magnitude for the nonworking subgroup (not shown). The estimate for the FSS-only program is a reduction of about $480, roughly 30 percent of the measured difference in Years 1 through 6. The extrapolated reduction for the FSS+incentives program is about $279, or 20 percent of the measured reduction during the follow-up period.

In the case of housing subsidies, the extrapolated increase for the FSS-only program is about $200 per family, about one-fourth of the estimated increase in earnings during Years 1 through 6. For the nonworking subgroup in this program, the extrapolated effect is a reduction of about $300 per family, consistent with the estimated increase in their earnings in Years 7 through 10;[25] this reduction contrasts with a measured increase of about $500 during Years 1 through 6. For FSS+incentives, an extrapolated reduction of about $400 represents about a third of the measured reduction during Years 1 through 6. The extrapolated reduction for nonworking families, about $600 per family, contrasts with the slight measured increase for Years 1 through 6.

Overall Benefit-Cost Results

Having considered all the measured outcomes listed at the outset in Table 6.1 and the way each is valued in dollars, the analysis turns now to the overall benefit-cost results. The estimates of NPV are provided in Table 6.7. These results, which add together the benefits and costs shown in Tables 6.5 and 6.6, *represent the best estimates of the overall economic value added by the FSS-only and FSS+incentives programs*.

[25] A reduction in subsidy is consistent with an increase in earnings. However, the reduction, less than 10 percent of the earnings increase, is smaller than might be expected, because HCV programs generally require that tenants contribute 30 percent of their income toward rent. This disparity might be caused by several factors, such as HCV earnings disregards and earnings increases by tenants with zero subsidy.

Table 6.7

Estimated Net Value (in 2016 Dollars)

	FSS-Only vs. Control			FSS+Incentives vs. Control		
		Government			Government	
Statistic	Program Group	Budget	Social	Program Group	Budget	Social
Core sample						
6-year point estimate	5,269	-4,559	710	1,408	-3,303	-1,895
P-value	0.149	0.063	0.857	0.703	0.182	0.634
90% confidence bounds	-733 to 11,272	-8,587 to -532	-5,774 to 7,194	-4,656 to 7,473	-7,372 to 766	-8,446 to 4,656
75% confidence bounds	1,071 to 9,468	-7,376 to -1,743	-3,825 to 5,245	-2,833 to 5,650	-6,149 to -458	-6,476 to 2,686
10-year point estimate	6,621	-4,570	2,051	-773	-1,780	-2,553
P-value	0.259	0.280	0.752	0.896	0.677	0.697
90% confidence bounds	-3,019 to 16,261	-11,529 to 2,389	-8,623 to 12,725	-10,512 to 8,965	-8,810 to 5,250	-13,337 to 8,230
75% confidence bounds	-121 to 13,363	-9,436 to 297	-5,414 to 9,516	-7,584 to 6,038	-6,697 to 3,137	-10,095 to 4,988
20% decay rate	6,168	-4,631	1,536	1,118	-2,300	-1,182
OLS based on last 4 qtrs.	5,171	-8,415	-3,244	-5,944	-5,355	-11,299
OLS based on all 6 yrs.	6,538	-3,290	3,248	-1,430	417	-1,014
Nonworking subgroup						
6-year point estimate	5,167	-787	4,380	8,647	-2,445	6,202
P-value	0.278	0.815	0.371	0.069	0.467	0.204
90% confidence bounds	-2,669 to 13,003	-6,329 to 4,754	-3,666 to 12,425	825 to 16,469	-7,977 to 3,087	-1,830 to 14,233
75% confidence bounds	-313 to 10,647	-4,663 to 3,088	-1,247 to 10,007	3,177 to 14,117	-6,314 to 1,424	585 to 11,819
10-year point estimate	6,192	1,712	7,904	9,650	-364	9,286
P-value	0.428	0.772	0.332	0.217	0.951	0.254
90% confidence bounds	-6,663 to 19,047	-7,992 to 11,416	-5,489 to 21,296	-3,183 to 22,482	-10,051 to 9,323	-4,083 to 22,655
75% confidence bounds	-2,799 to 15,182	-5,075 to 8,498	-1,463 to 17,270	675 to 18,624	-7,138 to 6,411	-64 to 18,636
20% decay rate	6,241	492	6,733	11,921	-1,437	10,484
OLS based on last 4 qtrs.	8,380	3,158	11,538	4,423	-360	4,063
OLS based on all 6 yrs.	6,044	2,160	8,204	7,890	1,668	9,558

NOTES: Estimates reflect discounting and adjustment for inflation. Estimates were regression-adjusted using ordinary least squares (OLS), controlling for pre-random assignment characteristics of sample members.

Rounding may cause slight discrepancies in calculating sums and differences.

Results for Participating Families

As indicated in Table 6.7, the NPVs of the FSS-only program are consistently positive from the perspective of participating families. This is largely due to the families' increased earnings, although the escrow, incentive payments, and tax credits also contribute to augmented family income. The net gain over 10 years is about $6,600, and this estimate is close to being statistically significant at the 75 percent level (as discussed below).[26] Also, the result is discounted to reflect 2016 dollars — adjusting all underlying estimates for forgone investment as well as inflation — so the $6,600 NPV estimate implies a nominal increase of more than $800 per year over the decade. The results for families that were not working at baseline are similar, producing a $6,200 net value at the end of 10 years.

The growth of the net value of the FSS-only program to nonworking families over time is shown in Figure 6.1. The plotted line indicates the point estimate of NPV for each year following random assignment, and the shaded area shows the 90 percent confidence interval for the estimate. The shaded area is large, providing a picture of the uncertainty attached to net value estimates, which themselves are determined by multiple estimates with uncertainty. The confidence intervals that create this shaded area are sometimes very large for subgroups; they are smaller for the core sample. (See Appendix Figures A.2 and A.3 for comparable core-sample NPV charts.)

The figure shows that families see steady economic improvement over 10 years, although the rate of improvement slows a bit after FSS escrow stops accruing and as public assistance is gradually lost. While uncertainty in the estimates climbs over time, most of the shaded area stays well above zero value throughout the 10 years.

The results for the FSS+incentives program are similarly negative for the core sample, and the results for nonworking families in the FSS+incentives program are better. However, the additional cost of the intervention (about $6,000, compared with $3,100 for the FSS-only program) is not fully offset by additional benefits: For this subgroup, the best estimate is a net gain over 10 years of about $9,700. ("Cost" here and in the next section refers to the sum of the three program costs — escrow, reward payments, and operations.) This implies a nominal gain of well over $1,000 per year. The pattern of NPV growth shown in Figure 6.2 is similar to that for the FSS-only group.

[26] In this chapter, statistical tests (and confidence intervals) at the 75 percent level are used, in addition to tests at the 90 percent level used in other chapters. This reflects the fact that net present values estimates, which combine multiple impact estimates, are subject to a particularly high level of uncertainty.

Results for Government Budgets

From the perspective of government budgets, the NPV of the FSS-only program is consistently negative for the core sample. There are offsets to the costs of the program, but taxpayers are left with a net-cost bill under all scenarios. However, the results for nonworking families indicate a positive NPV of about $1,700 after 10 years. As shown in Figure 6.1, the net cost builds quickly during the first three years and more slowly during the next three. Then, when all program costs have been incurred and the extrapolated post-program effects take hold, this cost is more than offset in Years 7 through 10. This pattern of results — an investment followed by a gradual increase in participating families' self-sufficiency — is precisely what FSS is intended to do. Note, too, that the extrapolated program effects are crucial to the end result.

The results for the FSS+incentives program are similar, but the additional cost of the intervention (about $6,000, compared with $3,100 for the FSS-only program) is not fully offset by additional benefits. Again, the results for nonworking families in the FSS+incentives program are better: The net cost at the end of 10 years is only about $400, an amount that potentially could be made up for if estimated program effects continue past Year 10. Figure 6.2 shows how the point estimate of net value drops as costs are incurred, and then benefits offset them as the extrapolated effects come into play.

Results for Society

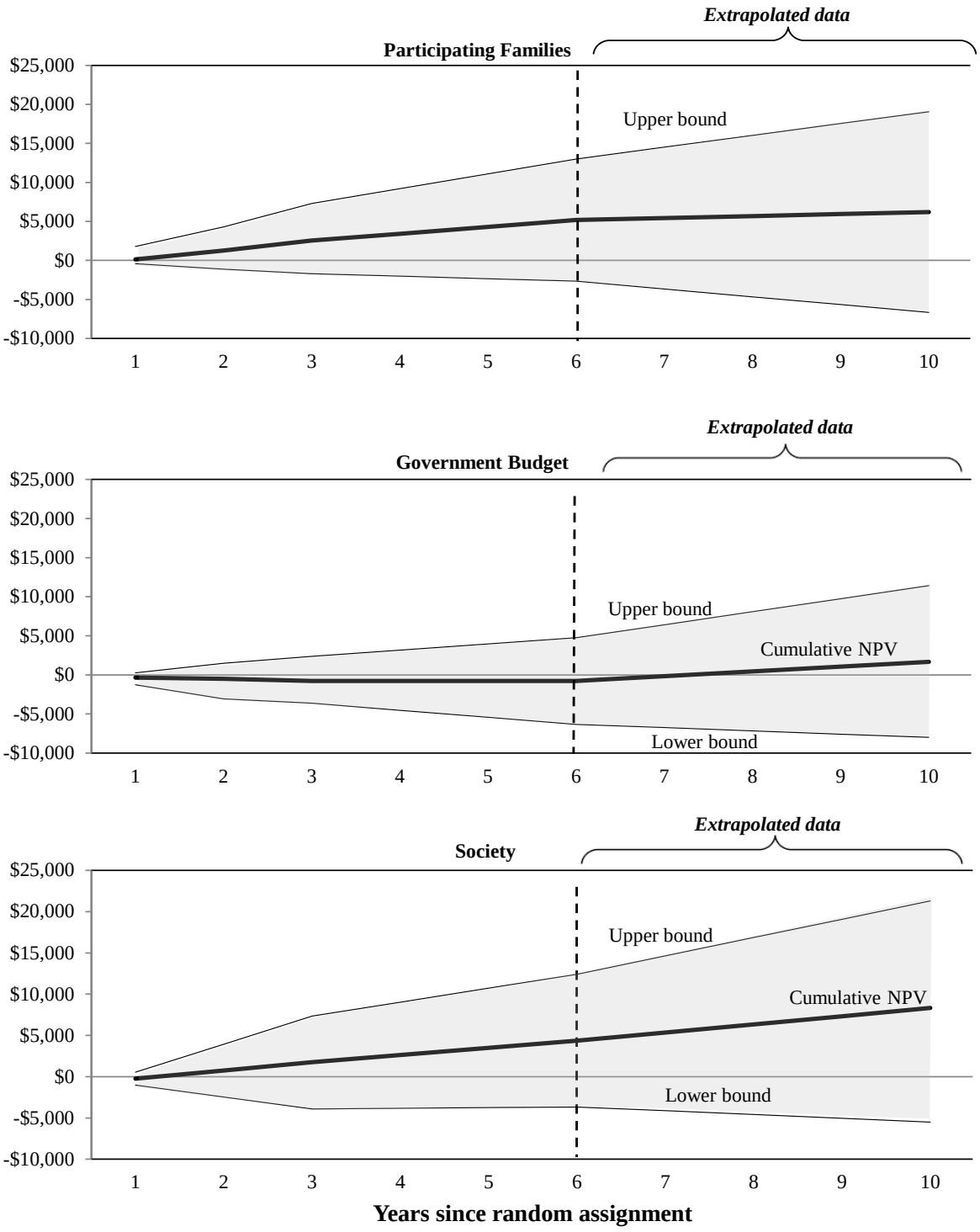
The NPV of the FSS-only program is positive, under all scenarios, for both the full sample and the nonworking subgroup. None of the estimates is statistically significant, but most of the confidence intervals around the estimates are positive. The net value of the program for the nonworking subgroup, about $7,900, indicates an impressive return on the investment in FSS. As shown in Figure 6.1, the program achieves break-even status during the fourth year after random assignment and rapidly adds to its net social value in the subsequent years covered by the analysis.

The social value of the FSS+incentives program for the full sample is negative, adding together the disappointing findings for both families and taxpayers. The results for nonworking families are strikingly different — an estimated NPV of about $9,200. This entire gain goes to participating families, as taxpayers nearly break even by the end of 10 years. However, an income gain of this magnitude for low-income families ($1,000 per year) can have effects on outcomes that are important to society, such as child well-being and academic performance.[27]

[27]Chetty, Friedman, and Rockoff (2011).

Figure 6.1

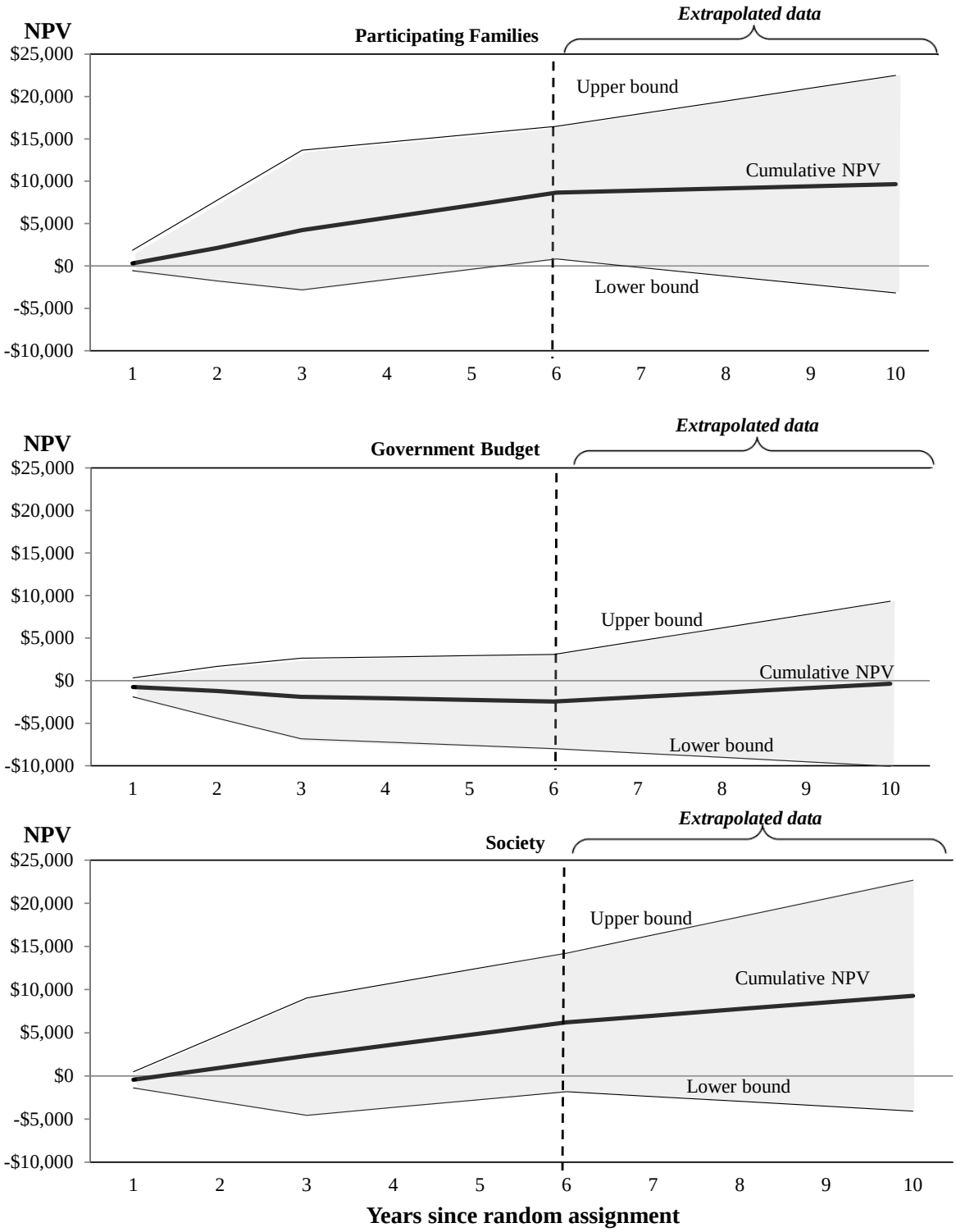
Ten-Year Cumulative Net Present Values (NPVs): FSS-Only, Head of Household Not Working at the Time of Random Assignment



NOTE: The shaded area represents the 90 percent confidence interval.

Figure 6.2

Ten-Year Cumulative Net Present Values (NPVs): FSS+Incentives, Head of Household Not Working at the Time of Random Assignment



NOTE: The shaded area represents the 90 percent confidence interval.

How Important Are Assumptions to the Results?

A number of assumptions are needed for the individual estimates that go into the calculated NPV of the two programs. One is that the measured program-control differences in outcomes represent the true effects of the programs, whether or not the differences are statistically significant. This issue has been addressed by the confidence bounds and statistical tests reported in this chapter. The statistical tests discussed above have been at a 90 percent confidence level, which is consistent with the findings given in Chapters 4 and 5. Table 6.7 also shows NPV estimates at a 75 percent confidence level. This is a lower confidence standard than used in the impact analysis, but it is a high hurdle for a multi-outcome and multiyear measure such as NPV, particularly when applied to relatively modest samples such as the nonworking subgroup. The change makes the six-year NPV estimates for the FSS-only program significant from the participating families and government budget perspectives and the six-year NPV estimate for the FSS+incentives program significant from the government budget perspective.

Another assumption is that extrapolated program-control differences — a critical part of this analysis — correctly indicate program effects beyond Year 6. This assumption may result in an overstatement or understatement of NPV over 10 years. As shown in Table 6.7, alternative assumptions can be made about outcomes after Year 6. These alternative assumptions include the following:

- The annual impacts measured in Year 6 decay by 20 percent each year in Years 7 through 10.
- The annual impacts measured in Year 6 grow by 20 percent each year in Years 7 through 10.
- Outcomes for the program and control groups follow the pattern shown in the four base-period quarters. Using ordinary least squares regression, a trend line is fitted to the four quarters and extended through Years 7 through 10.
- Outcomes follow the pattern over all 24 quarters of follow-up. The trend line fit to the 24 quarters is extended through Years 7 through 10.

With three exceptions, none of these alternative extrapolation approaches changes any of the qualitative conclusions presented above. The exception is the NPV of the FSS+incentives program for the core sample from the perspective of taxpayers, which becomes positive (+$417) instead of negative for the ordinary least squares (OLS) estimate based on all six years' extrapolation. Additionally, the social NPV for the FSS-only core sample switched from positive to negative (–$3,244) for the OLS estimate based on the last four quarters' extrapolation. Lastly, the government NPV for the FSS+incentives nonworking sample went from negative to positive (+$1,688) for the OLS estimate based on all six years' extrapolation. Also, with a

single exception, all of the NPV points from all perspectives using all alternative assumptions fall within the 75 percent confidence intervals provided in the table. One exception is the negative societal NPV for the core sample in the FSS+incentives program (–$11,299), which falls below the lower bound of the 75 percent interval. However, it falls within the 90 percent interval.

Also, a fifth alternative assumption — that there are zero effects in Years 7 through 10 — is provided in effect by the six-year estimates in the table. Assuming zero effects in Years 7 through 10 changes two qualitative conclusions: The program group NPV for the FSS+incentives core sample changes from negative to positive, and the taxpayers' NPV for the FSS-only nonworking subgroup changes from positive to negative. All the six-year point estimates of NPV are well within the 75 percent confidence intervals.

As they are for alternative extrapolation methods, these results are robust to alternative discount rate assumptions (as discussed in Appendix B). However, they would be qualitatively different if the following two assumptions were not made:

- Program impacts on employment and earnings do not result in the displacement of other current or potential workers. (By definition, workers are part of the taxpayer perspective.)
- Program impacts on employment and earnings do not harmfully reduce parenting time for children in FSS families.

The final assumption is that the resources used by the programs indicate accurately what is needed to deliver the FSS-only and FSS+incentives programs on an ongoing basis. In fact, both programs (and particularly the latter) could probably be delivered with lower unit costs, and this could change the taxpayer and societal NPV estimates.

Discussion of Benefit-Cost Results

In considering the effects of the FSS-only and FSS+incentives programs, the benefit-cost analysis casts a wider net than the impact analysis does in Chapters 4 and 5. First, it estimates effects on outcomes such as fringe benefits and tax credits as well as those on earnings, welfare, and housing assistance. Second, the measure of earnings used in the benefit-cost analysis includes all household members who enrolled in the study, not just the head of household. Third, the analysis estimates effects for a 10-year period, beyond the six years of follow-up that were actually observed. Finally, it considers the costs of programs that are being evaluated. Nevertheless, the benefit-cost analysis uses the same estimation models and statistical testing methods as the impact analysis, addressing somewhat different policy questions in a largely consistent way.

Both analyses address a key question: Are the FSS-only and FSS+incentives interventions effective? However, they do this from different vantage points and together provide a more comprehensive assessment of questions about program "success." The impact analyses presented in Chapters 4 and 5 show that the interventions produced program-control group differences in employment, earnings, public assistance receipt, and housing subsidies that were consistent with program goals, but almost none of the impacts was statistically significant, leaving little confidence that the impacts were genuine, at least for the overall core sample. On the other hand, the results for participants who were not working at baseline (and for any family whose head of household was not working) are very promising. The measured program-control group differences are relatively larger for this subgroup than for the core sample, and despite modest subgroup sample sizes, some effects, notably FSS-only public assistance impacts and FSS+incentives employment impacts, are statistically significant.

The benefit-cost analysis provides a fuller accounting of the economic value of the interventions, and not just for the families involved. It also includes imputed values for outcomes not directly measured and estimates covering a time horizon that extends beyond the period covered by available data. It shows that the small, though statistically insignificant, effects on multiple outcomes — including some not considered in the impact analysis — build to a reasonably large economic gain for families in both programs over the course of six years, particularly for the nonworking subgroup. For those families, the estimated net gain from participating in the program grows in Years 7 through 10, assuming the trends at the end of the follow-up period continue. At the same time, estimated costs for the FSS-only program incurred by taxpayers in Years 1 through 7 appear to be more than offset by reductions in reward payments to those families and increased tax collections. For the FSS+incentives program, taxpayers' costs appear largely (though not completely) offset by the end of 10 years. Finally, the best estimates (that is, the point estimates) of the NPV of these programs to society — about $7,800 for FSS-only and about $9,200 for FSS+incentives — are both large for the nonworking subgroup.

The overall 10-year findings from the societal perspective are consistent for the two programs in serving the nonworking subgroup: Both NPV estimates are large and, while not quite statistically significant, most of the confidence interval around the societal net value of each program is positive, and point estimates remain positive when alternative assumptions are used. However, there are strikingly different distributional results. Participating families and taxpayers appear to share the gain in the case of the FSS-only program, while families are the sole beneficiary for the FSS+incentives program. The reason for the disparity is simple: The FSS+incentives program cost more, notably because of reward payments and more accumulated escrow. While the program appears to generate a greater net gain for families, it does not produce enough taxpayer savings to offset the added cost — at least not through 10 years. While the conclusions of the benefit-cost analysis are constructive, they are subject to statistical

uncertainty. In addition, they are dependent on the success of FSS in helping nonworking families achieve labor market success. While the success with this subgroup is encouraging, there appears to be little, if any, return on investment in the group of sample members who were working at the time of random assignment. Indeed, the return for the working subgroup looks to be negative for the FSS+incentives program. Thus, the analysis underscores inferences, based on the implementation and impact analyses, that the FSS program that was evaluated as part of Work Rewards is not well suited to voucher holders who are already participating in the labor market.

Finally, it is important to recognize that the return on investment in FSS accumulates over many years. The Work Rewards demonstration began in 2007, and the results of the benefit-cost analysis suggest that the FSS program achieved a positive investment return — for taxpayers and for society as a whole — quite recently. The relatively slow payoff appears to result from the fact that FSS success is limited to families that are not in the labor market and uses an intervention lasting five to seven years to help some of them achieve self-sufficiency.

Ten years after the Work Rewards demonstration started, FSS+incentives — the enhanced version of the program using cash work incentives — has still not quite reached a break-even return from a government budget perspective. The additional cost of the incentive payments increased this program's investment cost to about $6,000, only one-fourth of which was offset by budgetary gains within six years. The subsequent payback would continue after 10 years.

Chapter 7

Assessing the Final Results

In 2007, the Work Rewards demonstration was launched to test the effectiveness of varied strategies aimed at helping New York City's Housing Choice Voucher (HCV)-assisted households make progress toward self-sufficiency. These strategies included the federal Family Self-Sufficiency program ("FSS-only" in this report) and an enhanced FSS program that included special cash work incentives ("FSS+incentives" in this report).[1] At the time the demonstration was launched, little evidence was available about FSS, locally or nationally: Is it effective? Do its core components — case management and escrow — increase employment, increase earnings, and help families make progress toward self-sufficiency? Would augmenting FSS with more immediate cash assistance make a difference? Is one approach more effective than the other? With the end of the evaluation, answers to these questions are in, and they offer valuable information for thinking about FSS and special work incentives as potential strategies for helping low-income families make strides toward economic mobility.

Work Rewards provides the most comprehensive assessment of an FSS program to date. Drawing on a mixed-methods approach, it looks at the program's successes from three distinct perspectives: (1) program *outcomes*, including participation in activities to support progress toward self-sufficiency goals, escrow accumulation, and finally graduation from FSS; (2) program *impacts* on employment, earnings, poverty, and a host of indicators of well-being, relative to a control group; and (3) a *benefit-cost* analysis. A full six years of follow-up data show some encouraging but limited impacts.

Based on the results presented in this report, it appears that the combination of FSS and the additional cash work incentives produced some promising results. Participants in the FSS+incentives group who were not working at the time of study enrollment increased their employment and earnings, which were sustained over five of the six years of follow-up. These positive effects were large in absolute terms but were nevertheless insufficient to produce transformative changes in poverty and material well-being or sustained impacts on government

[1]Work Rewards also included an intervention that only offered the special cash work incentives to participants and did not include FSS. This "incentives-only" intervention, which is not the focus of this report, was run by the New York City Housing Authority (NYCHA). It did not produce statistically significant effects on employment or earnings overall or for subgroups of interest. Box 1.1 in Chapter 1 includes an overview of the incentives-only model and its key findings, and the intervention is discussed in more detail in MDRC's two previous reports on Work Rewards — Verma et al. (2012) and Nuñez, Verma, and Yang (2015a).

benefits receipt.[2] In contrast, neither the FSS-only nor the FSS+incentives program appears to be effective for those who were already working when they enrolled. Though the New York City Department of Housing Preservation and Development (HPD) disbursed more than $2 million in escrow payments to FSS graduates — an obvious financial benefit to those who successfully completed the program — the FSS programs did not produce broad or deep impacts on the main goals as specified in each participant's Contract of Participation or Individual Training and Services Plan: employment and movement off cash assistance.

When limited to the evaluation's six years of results, the benefit-cost analysis, which focuses on households, also produced findings that were encouraging but not definitive. The economic value of FSS to participating families was established, with net value significant at the 75 percent level. However, the net cost to the government was also significant, leaving society with a small and statistically insignificant gain. Consistent with the impact findings, the benefit-cost results were more encouraging for those who were not working at the time of random assignment, who received more earned income, increasing their tax payments and reducing their public assistance, which lowers the net cost to taxpayers. The cash incentives ("reward payments") provided in the FSS+incentives intervention enhanced program results, leaving net value to society significant at the 75 percent level. These notable findings, when combined with the less encouraging findings for those who were working at the time of random assignment, results in the uncertain overall cost-effectiveness conclusion at the end of six years.

The conclusions of benefit-cost analysis through 10 years, while not certain, suggest that even if the impacts during the six-year follow-up period were not broad or deep, the extrapolation of impacts to Years 7 through 10 makes both programs cost-beneficial from the perspective of society, with little or no net cost to taxpayers. However, this result is driven by the successes of the programs for those not working at random assignment. From the taxpayer perspective, there appears to be little, if any, return on government's investment in the program for the working sample members. Indeed, the return for the working subgroup looks to be negative for the FSS+incentives program given the additional expenditures associated with the reward payments. Thus, the benefit-cost analysis underscores the inferences based on the other components of the evaluation (implementation and impact analyses) that FSS, as implemented during the Work Rewards demonstration, was not adequate to help improve the self-sufficiency of voucher holders who were already participating in the labor market.

Considering the totality of the evidence, this chapter asks why Work Rewards did not produce better overall results. In doing so, it also probes a number of related questions: Did

[2]The FSS interventions' effects on household poverty and well-being were assessed at the 48-month point, before escrow payments were disbursed to FSS graduates.

Work Rewards serve types of families who do not typically enroll in FSS? Was there anything unique or unusual about how FSS was implemented as part of Work Rewards? Would added work incentives benefit FSS? Are there features of the FSS framework that might need to be strengthened or modified to produce stronger and more effective programs, either in New York City or elsewhere? The assessment of the first two questions draws on comparisons with some national data available to MDRC. In answering the latter two questions, the section looks toward new forms of innovation designed to help housing-assisted families and developed drawing upon evidence from this and other studies.

Did Work Rewards Target an Unusual Population for FSS?

The answer seems to be no. FSS is a voluntary program, and though housing authorities promote it to the populations they serve, they do not do so aggressively. Rather, they rely on motivated individuals to come forward and sign up. To meet sample requirements within the study recruitment window, Work Rewards undertook more aggressive outreach than usual to market the program to all eligible individuals (including those who were not initially eager to apply). Furthermore, it did not screen voucher holders for their motivation to pursue self-sufficiency goals, which the U.S. Department of Housing and Urban Development (HUD) rules permit.

The design team also decided that Work Rewards, unlike many FSS programs, would target the most economically disadvantaged voucher households, those with incomes under 130 percent of the federal poverty level, the threshold for Supplemental Nutrition Assistance Program (SNAP) receipt.

These factors, the targeted population, and the aggressive outreach raise questions of generalizability that were noted in previous reports. Perhaps the Work Rewards sample is different from typical FSS participants in ways that limited the programs' impacts. With a national FSS impact evaluation now under way,[3] however, samples can be directly compared for potentially important differences. The national FSS impact study was designed as an attempt to capture FSS as it is normally run in all its variations and for the populations it usually serves. (The next section explains the FSS program as more of a framework than a rigid model, which allows different PHAs to implement it differently.) As a result, specific populations were not targeted for sample recruitment, and the standard recruitment activities of the public housing agencies (PHAs) were only lightly modified for study enrollment. And, overall, at least on measured demographics and background characteristics, the Work Rewards and FSS national

[3]See www.mdrc.org/project/family-self-sufficiency-evaluation.

samples are broadly similar. Although the FSS national evaluation did not specifically target households below 130 percent of the poverty line, based on SNAP receipt at baseline, the estimated percentage of households below that threshold in each sample is essentially identical. On other measures, including work status at random assignment, possession of a high school diploma, physical and mental health, age, and household size, the samples are broadly similar.

For the purposes of the FSS national evaluation, no sites screened participants for motivation, meaning that the HPD Work Rewards program was not unique in this regard.[4] Although it is not possible to measure the level of motivation present in each sample, based on measurable characteristics there is little reason to suggest that these samples differ drastically.

This observation has two implications: First, the Work Rewards sample is broadly representative of the types of individuals who enroll in FSS, and so it offers a fair test of the program. Second, while not definitive, the findings from the Work Rewards study are therefore valuable beyond New York City in shaping expectations about the effectiveness of the FSS framework overall and for specific populations (for example, those who are unemployed at program entry).

Was There Anything Unusual About How FSS Was Delivered in Work Rewards?

Though referred to as a program throughout this report, FSS is, as noted, sometimes thought of as a funding *framework*. HUD provides grants to PHAs to pay for case managers or coordinators, and PHAs can design how best to implement their programs on the ground. Therefore, FSS programs as implemented at other housing agencies may vary in intensity of contact and program emphasis. In many ways, Work Rewards' FSS implementation bears some similarity to FSS programs observed elsewhere. However, the Work Rewards program was unusual in two important ways.

First, it relied on community-based organizations (CBOs) — not PHA staff — to deliver the program, and it had a complicated contracting arrangement with them, which influenced their delivery of services. (This arrangement of having CBOs operate FSS was also new for HPD.) HPD's 100 percent performance-based contracts with the participating CBOs also limited how case managers engaged with participants. These contracts, which were tied to milestones, meant that the CBO service delivery was driven more by the contracts' payment points (or milestones) than by a clear service delivery strategy. This type of contracting ar-

[4]Only 2 of the 18 sites that are participating screened for motivation prior to the study.

rangement is not well suited for employment and social service programs, but HPD did not have the option to arrange a different kind of contract for the FSS service providers. The Work Rewards baseline data show that participants had significant barriers to both employment and employment advancement that may not have been effectively addressed by a 100 percent performance-based contract structured around milestones. A related complication, which also affected program operations, was that the CBO contracts were in place for only one year at a time — as they were dependent on HPD's receipt of annual HUD FSS grants to continue to fund FSS services — leading to uncertainty at the CBOs about whether, and in what form, the contracts would be renewed; this did not help the CBOs keep strong staff in the program.

Second, HPD's FSS program operated without the benefit of a Program Coordinating Committee (or PCC, required by HUD), which is meant to assist in securing public and private resources to operate the program. Most PHAs that operate FSS have formed PCCs to support their programs. The CBOs involved in Work Rewards were large, established, multiservice organizations, positioned to offer a broad range of services and supports to families served by the program. Over the course of the demonstration, to foster more collaboration among the CBO partners, HPD tried to get the CBOs to refer participants to each other and to stop functioning in silos, which would have allowed participants to take advantage of the different resources each CBO had to offer. For the most part, the Work Rewards CBOs had relatively informal partnerships with each other, with no clear commitment among partners to serve FSS participants.

The Work Rewards study cannot determine whether these features alone, which set HPD's FSS program apart from other FSS programs, actually played a part in limiting impacts, though it is plausible that they did. The FSS national study's implementation research will, among other things, investigate how PCCs operate in practice and whether and when they appear to improve the reach of FSS programs.

Did Combining Short-Term Special Work Incentives with the FSS Framework Add Value?

Yes, somewhat. Adding cash incentives to the FSS framework, at least initially, improved program engagement. The employment and earnings impacts for those in the FSS+incentives program who were not working at random assignment also showed that adding more immediate work incentives can improve FSS's employment and earnings, but only for a limited group of participants. When developing Work Rewards, the study design team hypothesized that the additional immediate incentives could also improve employment and earnings among those who were already working by reducing employment turnover, which, in addition to increasing income by reducing time spent unemployed, could increase tenure at a single employer and lead to advancement and therefore earnings gains. This sequence did not occur for everyone in the

FSS+incentives group, but the effects for those who were not employed at random assignment were substantial, though not transformative. Larger incentives may have had a stronger effect, but to extend benefits to those already employed and to deepen earnings impacts, more fundamental changes to the case management approach and the escrow account may be required.

Work Rewards' Approach to Supporting Self-Sufficiency Through FSS: Some Limitations

Through case management or case coordination, referrals, and the escrow incentive, FSS is meant to encourage participants to improve their employment potential, increase earned income, and build savings. FSS staff provide referrals to services like financial management, credit counseling, and job search assistance both within and outside the housing authority. And, the associated escrow account allows graduates to reclaim the increased rent payments that are the product of increased earnings under HUD rent rules. Ultimately, it is hoped that improved earnings will translate into decreased reliance on public assistance, including housing rental assistance programs like Housing Choice Vouchers (HCVs) and public housing. Housing rental assistance is not an entitlement and funding is limited; the program serves only a fraction of those who qualify for it, and waiting lists to receive this aid can grow large enough that the typical wait times can extend several years. Moving recipient households more quickly toward self-sufficiency and reduced housing assistance can free funds to serve other needy families.

Overall, there is little evidence to suggest that either FSS by itself or FSS plus the special work incentives — considered as workforce programs and in the context of the Work Rewards demonstration in New York City — can be broadly effective models for helping low-income individuals achieve self-sufficiency. Instead, their promise lies with those who enter the program out of work. While it is hard to generalize based on a test in a single city, given variation in programmatic and regional characteristics, it is important to look at the Work Rewards experience and question why FSS may have failed to produce broader benefits, especially for the nonworking participants.

A Goals Framework with No Clear Road Map

As with other FSS programs, participants who enrolled in the Work Rewards FSS study were required to meet at least two goals to successfully graduate from the program: They had to be employed at the time of graduation, and no family member could be receiving Temporary Assistance for Needy Families (TANF) benefits during the 12 months leading up to graduation. HPD did not impose any specific employment requirements — such as the number of hours or months worked — and any work counted, as long as the participant was employed at the time the graduation determination was being made. This is well within the norm for how FSS programs are run nationally. In general, and much like FSS in the Work Rewards study, the

goal-setting approach used by the CBOs gave priority to long-term employment (that is, any employment at the time of graduation), with few short-term or interim objectives identifying a clear path to goal achievement. Without smaller steps to focus on, and with infrequent follow-up with case managers (discussed below), participants may have become discouraged or may simply not have understood how to make progress toward their goals.

Infrequent Case Management and Restrictive Contract Structure

Follow-ups and check-ins with CBO staff were largely participant-driven, and regular or more frequent check-ins were not a program requisite; participants were only required to meet once a year with their case managers, who were carrying large caseloads (close to 100). Many participants rarely met with their case managers, and nearly 40 percent of the FSS-only group had not interacted with a CBO case manager in 3.5 years of enrollment. This finding may reveal a light-touch approach to case management, where participants had to initiate follow-up, may not have perceived value in continued engagement, or may have had situational or other problems that got in the way of active engagement with their case managers. Given FSS's five-year timeline, more frequent engagement may have allowed case managers to review progress, provide interim feedback, and help participants stay on track and succeed in their goals. Although HPD instituted Year 4 check-ins to ensure participants were on track, the participation data suggest that most participants had disengaged from the program by then: They had little interaction with their CBOs, nor were they seeking their services.

A comparison of outcomes in educational attainment versus banking might shed light on the value and limitations of the FSS case management approach by itself. The programs led to increased enrollment in educational programs but not to increased completion. Conversely, the programs led to increases in the number of individuals with bank accounts, and these differences persisted over time. The differences in apparent effectiveness of case management are perhaps the result of differences in the commitment that is necessary to reach each outcome goal. Completing a degree or certificate program is a long process that requires financial and emotional support. While participants may recognize the value of obtaining additional credentials, they may not be equipped to handle its associated challenges. By contrast, most of the work that is associated with a bank account is in up-front setup.

A case management approach focusing on referrals and help with initial applications might be sufficient to induce impacts on entry (into a course or into a banking arrangement) but not on outcomes that require sustained efforts. As a result, the program may be less effective in influencing outcomes that require more prolonged effort.

Challenges Keeping Participants Engaged

As noted, the FSS programs suffered from low overall engagement. Even among participants who did meet with their case managers, frequent interaction was rare. About one-fourth of FSS-only participants met with their case managers more than twice throughout the length of the program, and about a third of FSS+incentives participants did so, suggesting that engagement was slightly better for those who were offered incentives than for those who were not. Early field observations and interviews suggested that engagement in FSS activities was lower than had been anticipated (with or without the special work incentives) because enrollment in FSS was voluntary and, among welfare recipients, preexisting requirements to participate in the city's mandatory welfare-to-work programs competed for their time and attention. Additionally, scheduling conflicts, transportation and language barriers, and some concerns about the value of what FSS offered may have kept some individuals from taking full advantage of the program.

Rethinking How FSS Supports Working Participants

The programs did not produce statistically significant impacts on earnings or employment for those working at random assignment. On the other hand, those working at random assignment were more likely to earn the special work incentives and more likely to graduate from FSS and receive an escrow disbursement. While the employed thus benefited from FSS (a windfall effect), from the perspective of the government, FSS did not deliver its intended results for these participants.

The already-employed individuals had more difficulty incorporating FSS into their lives along with work and family responsibilities. Furthermore, many viewed the services that FSS offered as largely focused on work readiness and job searches, and not likely to help them with employment advancement. Other studies that have carefully tested much more intensive initiatives for low-income populations who are employed underscore the difficulty of helping working participants advance, suggesting that FSS struggled with the same issue.

Escrow Savings Account: Weak Work Incentive or Underused to Promote Work

Once enrolled in FSS, participants received annual escrow statements from HPD with information on their escrow credits. Beyond this, and given the low frequency of contact with program staff, there were few opportunities for staff to discuss the escrow financial incentive or to use the tool to encourage participants to find work or advance in current employment. While contacts with HPD staff provided opportunities for participants to discuss the escrow account, CBO staff found it challenging early on in the program to communicate the workings of the account to participants.

Six years of follow-up data also show that large numbers of participants did not meet their FSS graduation requirements. This included some who had accumulated — and therefore subsequently forfeited — escrow balances. Even among those who graduated, about 30 percent had not accumulated any escrow during program participation and therefore received no disbursement.

Thus, it is at least possible that the lack of employment or earnings impacts may also be explained by the distant and uncertain incentive provided by the escrow account, given that the payout occurs at graduation, mostly five years in the future. This condition may make escrow a weak incentive, especially if staff are not in frequent contact with participants and have trouble marketing and explaining it. As observed in interactions with participants, FSS staff members did not prompt discussions about the escrow account, how families could accumulate savings through increased earnings, and the conditions for receiving a payout as much as the program designers had intended. In addition, the agencies' contracts with the housing authority did not include any provisions relating to escrow accounts among the many milestones in their performance-based contracts. In an effort to increase participants' awareness of the escrow component, Seedco devised new marketing strategies, which included special mailings and automated phone calls to program group members. However, FSS program staff mostly continued to wait for queries, and they referred participants who contacted them to housing authority case managers at HPD for more specific information. Thus, more technical assistance and support might have been necessary to prepare CBO staff who may not have been familiar enough with housing subsidy policies to draw out the benefits of escrow. Further, the 42-month survey data show that while most FSS participants had heard of the escrow account, many did not correctly understand some of the criteria for qualifying for an escrow payment, and few understood all of the criteria — reinforcing the importance of more active communication with participants around this financial incentive.

What May Be Learned from the National Evaluation: Varieties of FSS

As noted, in the time since the launch of Work Rewards, MDRC began a national evaluation of FSS. This study, commissioned by HUD and including 18 housing agencies across the country (with a sample of 2,600 voucher holders), has already helped provide context for the Work Rewards study and insight into what is unique (or not) about the HPD FSS program. Because the 18 participating sites span a wide range of programmatic approaches and contexts (for example, "tight" versus "loose" housing and labor markets), the national study will allow investigation into implementation variations of the FSS framework. Can changes in implementation and emphasis within the existing FSS structure improve program outcomes and strength-

en impacts? Does FSS work better in certain environments? The first results from that study are expected in late 2017.

Continuing to Test Innovative Approaches to Supporting Work Among Housing-Assisted Families

FSS includes some attractive features, including a multiyear framework to help families work toward self-sufficiency goals and steady (but limited) annual funding for case management, but more needs to be done to support families and help them advance. As noted, while the national FSS evaluation will explore how effective programs operating under the existing system can be, stronger case management and different approaches to encouraging work may be necessary to build on FSS's successes. Alternate strategies have been proposed, some of which are currently under evaluation.

Housing Subsidies Structured to Promote Work

The FSS escrow account represented, in part, an attempt to counteract the potential work disincentives associated with voucher subsidy rules from outside the rent policy structure. This approach may have had lower salience or perceived value than one that builds work incentives into the housing subsidy rules themselves. In 2012, HUD commissioned the design and testing of an alternative rent policy that would be simpler to administer and creates a greater financial incentive for tenants to work. Called the Rent Reform Demonstration, which is now in progress at four PHAs, it offers an important opportunity to test the effects of another incentives strategy that operates "inside" the housing subsidy rules, rather than apart from them. One of the main goals of the new rent policy is to allow working voucher holders to keep all their earnings increases and not pay any more toward their rent and utilities, no matter how much their earnings grow, during a three-year recertification window. The intent of this policy change is to effectively reduce the implicit marginal "tax" rate on earnings from 30 percent (under traditional rules) to zero during a specified period.

MDRC is conducting a rigorous and comprehensive evaluation of the new rent policy, using a randomized controlled trial, to determine whether it improves voucher holders' labor market outcomes and reduces reliance on housing subsidies and other major government benefits. The first impact results will available in 2018, capturing participants' early labor market responses to the alternative rent policy.

Highly Structured Coaching and Work-Focused Incentives

Another promising area of research focuses on ways to strengthen the case management and guidance components of self-sufficiency programs targeting housing-assisted families. This

does not simply mean changes to the frequency or intensity of contact but a rethinking of the nature of that interaction. MyGoals for Employment Success, a new MDRC demonstration, combines highly personalized and structured goal setting and coaching with a new set of immediate financial incentives to support participants in making step-by-step progress toward better labor market and other personal well-being goals.[5] The model incorporates lessons from recent behavioral research and neuroscience showing that just coping with poverty consumes cognitive resources and can weaken the application of executive functioning skills. These skills involve the ability to plan, organize, stay focused, and follow through on tasks across multiple spheres of life.

MDRC is testing MyGoals in at least two cities in cooperation with local PHAs. As with Work Rewards, MyGoals will use a randomized controlled trial to measure the program's effects on a variety of self-sufficiency outcomes, including employment, earnings, and receipt of housing subsidies. The first results from this study will be available in 2019.

[5]The model is inspired by innovations pioneered by Boston-based EMPath (formerly known as Crittenton Women's Union).

Appendix A

Supplementary Tables on Program Impacts

Appendix Table A.1

Baseline Characteristics of Households in the FSS Study, Core Sample

Characteristic	FSS Study Sample
Number of children in household (%)	
0	37.4
1	22.8
2	21.0
3 or more	18.8
Average number of children in household	1.3
Average number of adults in household	1.4
Households with more than one adult (%)	33.8
Average number of adults enrolled	1.2
Households with more than one adult enrolled (%)	13.8
Primary language spoken at home is English (%)	68.5
Receiving TANF or SNA (%)	18.1
Receiving food stamps[a] (%)	69.6
At least one adult covered by public health insurance (%)	76.9
Not receiving any public benefits (%)	13.0
Earnings above 130% of federal poverty level[b] (%)	9.6
Length of time receiving Section 8 (%)	
Less than 1 year	8.8
1-3 years	22.6
4-6 years	27.0
7-9 years	14.3
More than 9 years	27.3
Household's share of the rent (%)	
$0 - $200	33.1
$201 - $400	46.1
$401 or more	20.7
During the last 12 months, household was unable to (%)	
Pay rent and utility bills	42.0
Pay telephone bills	26.4
Buy food or prescription drugs	20.6
Sample size	1,455

SOURCE: MDRC calculations using Work Rewards Baseline Information Form data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

TANF is Temporary Assistance for Needy Families. SNA is Safety Net Assistance.

[a]This measure is calculated using administrative data from the New York City Human Resources Administration (HRA) rather than data from the Baseline Information Form.

[b]More than 5 percent of data were missing (5.3 percent) because some respondents did not provide earnings information.

Appendix Table A.2

Baseline Characteristics of Adults in the FSS Study, Core Sample

Characteristic	FSS Study
Female (%)	78.9
Age (%)	
18-24 years	9.2
25-34 years	20.4
35-44 years	31.1
45-59 years	37.4
60-61 years	1.9
Average age (years)	41
Marital status (%)	
Single	65.6
Cohabitating	0.9
Separated, widowed, or divorced	18.5
Married or in a legal domestic partnership	15.1
Relationship to head of household (%)	
Head of household	86.2
Spouse or legal domestic partner	4.2
Child or parent	8.8
Other	0.8
U.S. citizen[a] (%)	84.3
Race/ethnicity (%)	
Hispanic/Latino	42.8
White, non-Hispanic/Latino	2.4
Black, non-Hispanic/Latino	46.3
Other	8.5
Has an account at bank or credit union (%)	45.7
Has savings (%)	20.7
Has loans (%)	30.2
Education (highest degree or diploma earned) (%)	
GED certificate	8.6
High school diploma	16.3
Some college	20.6
Associate's degree/2-year college	6.4
4-year college or beyond	6.9
None of the above	41.2
Has high school diploma or GED certificate (%)	58.8
Has trade license or training certificate (%)	40.2

(continued)

Appendix Table A.2 (continued)

Characteristic	FSS Study
Employment measures	
Currently working (%)	48.6
Working full time[b] (%)	29.8
Total weekly earnings[c] (%)	
$0	54.2
$1 - $200	14.6
$201 - $400	22.5
$401 or more	8.7
Average number of months worked among those who worked in past year	9.9
Health measures	
Has physical, emotional, or mental health problem that limits work (%)	16.7
Health insurance coverage (%)	
Public health insurance	78.3
Employer health insurance	7.1
Other health insurance	2.8
Not covered	11.9
Over the past 2 weeks, had been feeling down, depressed, or hopeless (%)	21.2
Sample size	1,603

SOURCE: MDRC calculations using Work Rewards Baseline Information Form data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

GED is General Educational Development.

[a]Refers to U.S. citizens both by birth and by naturalization.

[b]Refers to 30 hours a week or more.

[c]More than 5 percent of data were missing (5.8 percent) because some respondents did not provide earnings information.

Appendix Table A.3

Participation in the FSS Program over Five Years, by Program Group, Core Sample

Outcome	FSS-Only	FSS+ Incentives	Difference (Impact)		P-Value
Any service received or milestone achieved (%)	59.5	74.8	15.3	***	0.000
Services received (%)					
Needs assessment	55.8	71.2	15.4	***	0.000
Case management and follow-up services	40.8	57.9	17.1	***	0.000
Financial and support milestones achieved (%)					
Attended financial literacy class or other asset-building service	13.7	12.2	-1.5		0.490
Linked to benefits or work supports	11.7	15.0	3.3		0.110
Credit improved	3.0	5.0	2.0	*	0.074
Linked to family-based support services	12.3	16.3	3.9	*	0.075
Employment milestones achieved (%)					
Began education/job training program	12.0	18.4	6.5	***	0.004
Started employment	15.4	19.7	4.3	*	0.069
Continuous employment - 30 days	16.3	27.1	10.7	***	0.000
Continuous employment - 90 days	12.1	19.6	7.5	***	0.001
Continuous employment - 180 days	7.9	12.3	4.4	**	0.018
Wage gain/promotion	3.2	7.0	3.9	***	0.003
Education upgrade	7.4	10.4	3.0	*	0.095
Number of services received or milestones achieved (%)	3.2	4.2	1.0	***	0.001
0	40.3	25.0	-15.3	***	0.000
1	16.9	13.2	-3.7	*	0.098
2 or more	42.8	61.8	19.0	***	0.000
Sample size (total = 1,050)	534	516			

SOURCE: MDRC calculations from Seedco's Work Rewards program data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between FSS-only and FSS+incentives outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Appendix Table A.4

Six-Year Impacts on Household Income, FSS Study, Core Sample

Outcome ($)	Average Outcome Levels			FSS-Only vs. Control		FSS+Incentives vs. Control		FSS+Incentives vs. FSS-Only	
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Difference (Impact)	P-Value	Difference (Impact)	P-Value
Total household earnings									
Year 1	7,781	7,786	7,611	170	0.674	175	0.668	5	0.990
Year 2	8,503	8,358	7,997	505	0.345	360	0.504	-145	0.788
Year 3	9,038	8,471	8,141	896	0.162	329	0.611	-567	0.380
Year 4	9,024	9,209	8,411	613	0.387	798	0.265	185	0.795
Year 5	9,545	9,338	8,787	758	0.328	551	0.481	-207	0.790
Year 6	10,553	9,792	9,992	561	0.495	-199	0.810	-760	0.358
Full period	54,443	52,954	50,940	3,503	0.288	2,014	0.545	-1,489	0.653
Total household income, excluding incentive payments									
Year 1	12,218	12,302	12,147	71	0.859	156	0.700	85	0.833
Year 2	13,319	13,134	12,994	325	0.535	140	0.791	-185	0.725
Year 3	13,655	12,928	12,820	835	0.179	108	0.864	-727	0.245
Year 4	13,393	13,389	13,040	353	0.614	349	0.621	-5	0.995
Year 5	13,734	13,321	13,230	504	0.508	91	0.906	-413	0.590
Year 6	14,169	13,413	13,763	406	0.616	-350	0.668	-756	0.354
Full period	80,488	78,486	77,994	2,494	0.439	492	0.880	-2,001	0.538
Total household income, including incentive payments									
Year 1	12,222	12,585	12,143	78	0.846	442	0.278	363	0.371
Year 2	13,324	13,646	12,989	335	0.527	657	0.219	322	0.545
Year 3	13,655	12,994	12,821	834	0.180	172	0.784	-661	0.291
Year 4	13,393	13,389	13,040	353	0.614	349	0.621	-5	0.995
Year 5	13,734	13,321	13,230	504	0.508	91	0.906	-413	0.590
Year 6	14,169	13,413	13,763	406	0.616	-350	0.668	-756	0.354
Full period	80,488	78,486	77,994	2,494	0.439	492	0.880	-2,001	0.538
Sample size (total = 1,455)	492	476	487						

(continued)

Appendix Table A.4 (continued)

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records, the New York City Human Resources Administration (HRA), and Seedco's Work Rewards program data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The UI and HRA outcome data cover employment, earnings, Temporary Assistance for Needy Families (TANF) and Safety Net Assistance (SNA) payments, and food stamp receipt data through March 31, 2015, and for 6 years after study entry for most sample members.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences. Dollar averages include zero values for nonworking sample members.

This table includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

Appendix Table A.5

Six-Year Impacts on Household Income, by Employment Status at Random Assignment, FSS Study, Core Sample

Outcome ($)	Average Outcome Levels			FSS-Only vs. Control			FSS+Incentives vs. Control		
	FSS-Only	FSS+ Incentives	Control Group	Difference (Impact)	P-Value	Sig.	Difference (Impact)	P-Value	Sig.
Head of household not working at random assignment									
Total household earnings									
Year 1	3,367	3,680	2,707	660	0.197		973 *	0.056	†
Year 2	4,475	4,923	3,140	1,336 *	0.052		1,783 ***	0.009	††
Year 3	5,151	5,289	3,660	1,491 *	0.065		1,630 **	0.043	†
Year 4	4,995	5,800	4,292	703	0.432		1,508 *	0.091	
Year 5	6,084	6,098	4,810	1,274	0.200		1,288	0.193	
Year 6	7,026	6,573	5,702	1,324	0.211		871	0.409	
Full period	31,097	32,363	24,310	6,787	0.106		8,053 *	0.055	
Total household income, excluding incentive payments									
Year 1	8,839	9,308	8,448	391	0.445		860 *	0.092	
Year 2	10,178	10,509	9,248	930	0.180		1,261 *	0.069	†
Year 3	10,515	10,394	9,355	1,160	0.158		1,039	0.205	
Year 4	10,025	10,502	9,730	295	0.748		773	0.399	
Year 5	10,849	10,651	9,888	961	0.342		763	0.449	
Year 6	11,141	10,746	10,171	970	0.363		574	0.589	
Full period	61,548	62,111	56,841	4,707	0.271		5,270	0.217	
Total household income, including incentive payments									
Year 1	8,840	9,434	8,450	390	0.453		984 *	0.058	
Year 2	10,179	10,763	9,247	932	0.185		1,516 **	0.031	
Year 3	10,516	10,424	9,355	1,161	0.158		1,068	0.192	
Year 4	10,025	10,502	9,730	295	0.748		773	0.399	
Year 5	10,849	10,651	9,888	961	0.342		763	0.449	
Year 6	11,141	10,746	10,171	970	0.363		574	0.589	
Full period	61,548	62,111	56,841	4,707	0.271		5,270	0.217	
Sample size (total = 721)	237	241	243						

(continued)

Appendix Table A.5 (continued)

Outcome ($)	Average Outcome Levels: FSS-Only	Average Outcome Levels: FSS+ Incentives	Average Outcome Levels: Control Group	FSS-Only vs. Control: Difference (Impact)	FSS-Only vs. Control: P-Value	FSS-Only vs. Control: Sig.	FSS+Incentives vs. Control: Difference (Impact)	FSS+Incentives vs. Control: P-Value	FSS+Incentives vs. Control: Sig.
Head of household working at random assignment									
Total household earnings									
Year 1	12,159	12,026	12,449	-290	0.630		-422	0.493	†
Year 2	12,508	11,913	12,756	-248	0.763		-843	0.317	††
Year 3	12,790	11,812	12,561	229	0.818		-750	0.461	†
Year 4	12,956	12,820	12,475	481	0.661		345	0.758	
Year 5	12,885	12,858	12,781	104	0.931		77	0.950	
Year 6	13,940	13,295	14,334	-394	0.755		-1,039	0.422	
Full period	77,237	74,725	77,357	-119	0.981		-2,632	0.611	
Total household income, excluding incentive payments									
Year 1	15,577	15,485	15,811	-234	0.690		-326	0.587	
Year 2	16,445	15,924	16,686	-241	0.757		-762	0.339	†
Year 3	16,658	15,721	16,262	396	0.669		-541	0.568	
Year 4	16,655	16,575	16,315	340	0.745		260	0.808	
Year 5	16,515	16,348	16,560	-45	0.969		-212	0.855	
Year 6	17,084	16,382	17,422	-338	0.782		-1,040	0.406	
Full period	98,934	96,436	99,056	-122	0.980		-2,620	0.591	
Total household income, including incentive payments									
Year 1	15,589	15,927	15,799	-210	0.722		128	0.832	
Year 2	16,455	16,705	16,674	-218	0.782		32	0.969	
Year 3	16,658	15,824	16,265	392	0.672		-441	0.642	
Year 4	16,655	16,575	16,315	340	0.745		260	0.808	
Year 5	16,515	16,348	16,560	-45	0.969		-212	0.855	
Year 6	17,084	16,382	17,422	-338	0.782		-1,040	0.406	
Full period	98,934	96,436	99,056	-122	0.980		-2,620	0.591	
Sample size (total = 722)	251	232	239						

(continued)

Appendix Table A.5 (continued)

SOURCE: MDRC calculations using administrative records data from New York State unemployment insurance (UI) wage records, the New York City Human Resources Administration (HRA), and Seedco's Work Rewards program data.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

The outcome data cover employment, earnings, Temporary Assistance for Needy Families (TANF) and Safety Net Assistance (SNA) payments, and food stamp receipt data through March 31, 2015, and for 6 years after study entry for all sample members.

Estimates were regression-adjusted using ordinary least squares, controlling for sample members' pre-random assignment characteristics. A two-tailed t-test was applied to the differences between program and control group outcomes. The p-value indicates the likelihood that the difference arose by chance. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Statistical significance levels for differences in impacts across subgroups (Sig.) are indicated as follows: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for nonworking sample members.

Appendix Table A.6

Receipt of TANF/SNA, Food Stamps, and Housing Assistance over Six Years, FSS Study, Core Sample Control Group

Sample and Type of Benefit	Sample Size (N)	Receipt Rate (%)	Average Amount per Household ($)
Core sample	487		
TANF/SNA		59.4	8,650
Food stamps		92.2	18,405
Housing assistance		98.1	59,456
Total		99.6	86,510
Not working at random assignment	243		
TANF/SNA		70.0	13,151
Food stamps		93.2	19,380
Housing assistance		97.9	58,236
Total		99.6	90,767
Working at random assignment	239		
TANF/SNA		48.4	4,255
Food stamps		91.3	17,445
Housing assistance		98.3	61,056
Total		99.5	82,756

SOURCE: MDRC calculations using administrative records data from the New York City Human Resources Administration (HRA) and from the New York City Department of Housing Preservation and Development (HPD) Section 8 housing records.

NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly individuals and disabled individuals.

The HRA outcome data cover Temporary Assistance for Needy Families (TANF) and Safety Net Assistance (SNA) payments, and food stamp receipt through March 31, 2015, and for 6 years after study entry for each sample member.

TANF/SNA and food stamp outcomes and impacts are averages among core sample households.

Rounding may cause slight discrepancies in calculating sums and differences.

Dollar averages include zero values for sample members who did not receive TANF/SNA or food stamps.

Appendix Table A.7

Estimated Program Participation Costs per Household (in 2016 Dollars)
FSS-Only and FSS+Incentives

	Calculation						Result		
	Average Cost per Enrollee ($)			Average Unit of Participation[a]			Average Cost per Household ($)		
Cost Component	FSS-Only	FSS+ Incentives	Control Group	FSS-Only	FSS+ Incentives	Control Group	FSS-Only	FSS+ Incentives	Control Group
Years 1-3									
FSS program operations									
Service use[b]	461	463	1,646	2.1	3.2	0.0	984	1,499	10
Qualified for escrow[c]	108	108	81	1.0	1.0	0.2	105	103	14
Earned reward payments[d]	-	500	-	-	2.0	-	-	985	-
FSS program management[e]	409	409	180	1.0	1.0	0.2	401	392	32
Years 4-5									
FSS program operations									
Service use[b]	473	445	823	0.6	0.6	0.2	271	253	145
Qualified for escrow[c]	103	103	103	1.0	1.0	0.2	101	99	18
Earned reward payments[d]	-	-	-	-	-	-	-	-	-
FSS program management[e]	387	387	281	1.0	1.0	0.2	379	371	50
Year 6									
FSS program operations									
Service use[b]	236	223	411	0.1	0.1	0.0	28	25	6
Qualified for escrow[c]	51	51	51	0.2	0.2	0.0	10	10	1
Earned reward payments[d]	-	-	-	-	-	-	-	-	-
FSS program management[e]	193	193	141	0.2	0.2	0.0	39	37	2

(continued)

Appendix Table A.7 (continued)

SOURCE: MDRC calculations using FSS milestones database, the New York City Department of Housing Preservation and Development (HPD)'s administrative cost data, and Seedco's program data and administrative cost data.

NOTES: Estimates reflect discounting and adjustment for inflation. Tests of statistical significance were not performed.

[a]Average unit of participation is measured differently for each cost component. For escrow administration and program management costs, it is measured per family enrolled. For services administration costs, it is measured as the number of months an FSS milestone was achieved for activities (or milestone-months). For reward payment administration costs, it is measured as the number of rewards earned for reward payment activities.

[b]Service costs include all FSS-related activities performed by the community-based organizations (CBOs), which includes holding program orientations, meeting with clients to complete a needs assessment and career plan, and ongoing case management and workforce development. In the first part of the program services from the CBOs were only available to the FSS-only and FSS+incentives group; later in the program, all FSS clients were allowed to get services from the CBOs. These costs also include all FSS-related activities performed by LaGuardia Community College. In the first part of the program, services from LaGuardia were only available to regular FSS clients; later in the program, all FSS clients (including FSS-only and FSS+incentives group) were allowed to get services from LaGuardia.

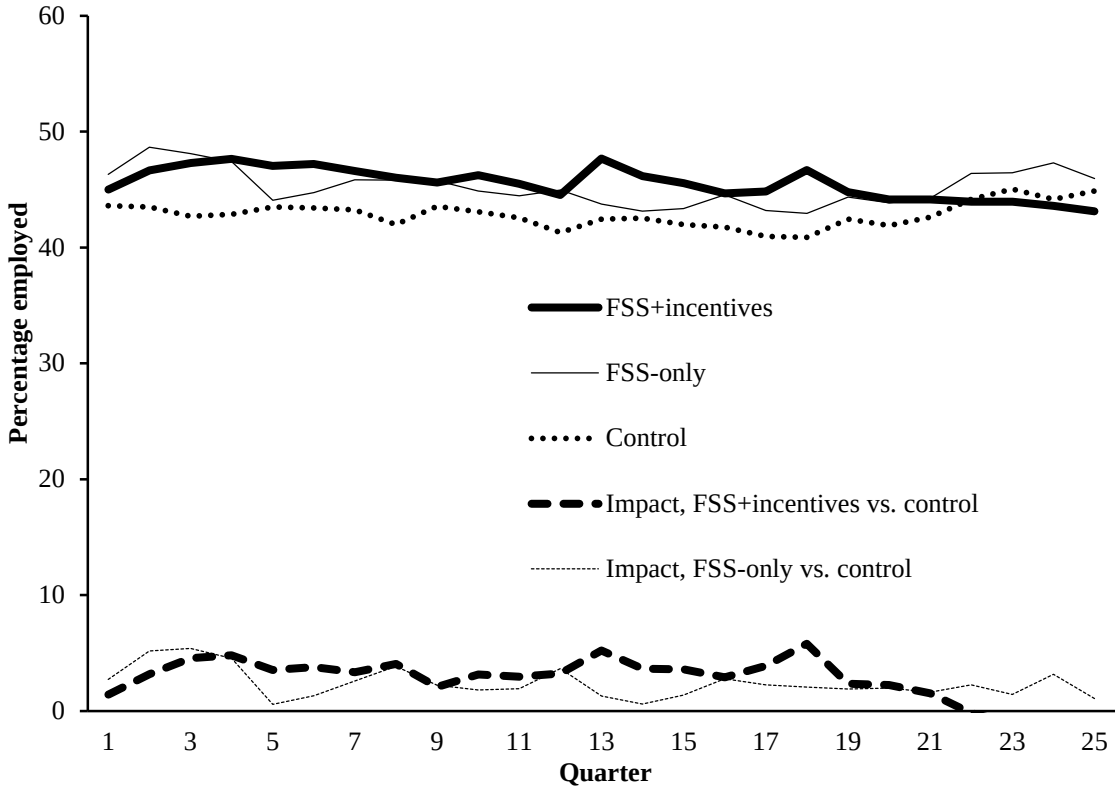
[c]Escrow costs include general management and oversight of the FSS program by HPD, which includes assisting clients and CBO staff with FSS escrow questions and sending annual escrow account statements to clients.

[d]Reward payment costs include all reward payment activities performed by Seedco, which includes creating coupon books for reward payments, verifying requirements for rewards were met, maintaining up-to-date bank account information to make sure payments are disbursed to the correct accounts, issuing "earnings statements" each payment period to mail to sample members, creating and maintaining a helpline to answer sample member questions, making payments to sample members who earned rewards, sending mailings to sample members about program rule changes, marketing the program, general program management, and oversight of CBOs. They also include all reward payment activities performed by the CBOs, which includes program orientations, refresher sessions, coupon book distribution, customer service, social events, and workshops.

[e]Program management costs include all FSS-related activities performed by Seedco, which includes overseeing the CBOs (holding management meetings, management reports, site visits, provide technical assistance to CBOs), and reviewing and processing payments to the CBOs. This also included hiring case managers and job developers to work at CBOs; however, this was only for a brief period of time.

Appendix Figure A.1

Quarterly Employment Impacts, FSS Study, Core Sample



SOURCE: MDRC calculations from New York State unemployment insurance (UI) wage records.

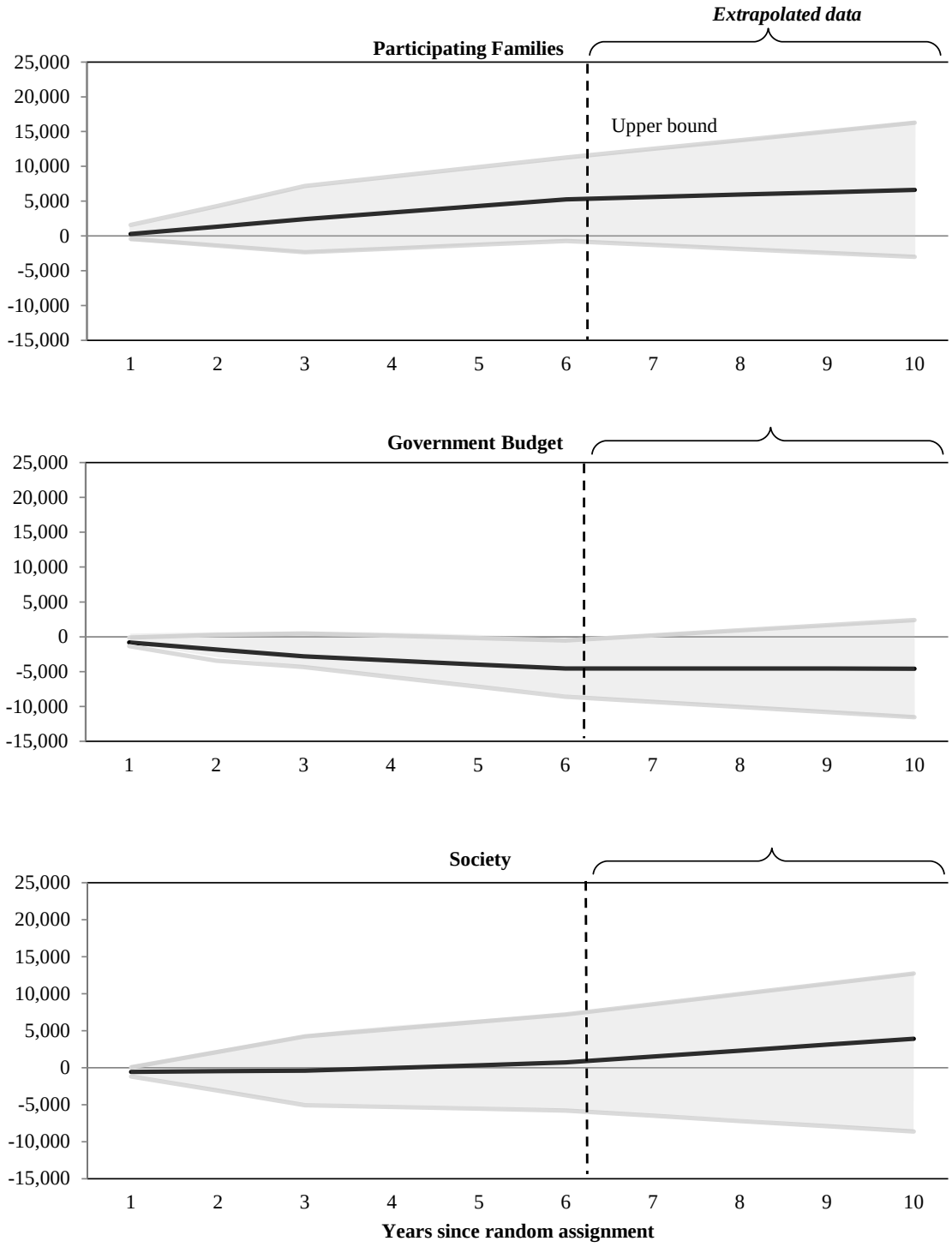
NOTES: The core sample includes housing voucher recipients who were randomly assigned between January 1, 2008, and January 16, 2009, and excludes elderly and disabled individuals.

Quarter 1 refers to the quarter of random assignment.

This figure includes only employment and earnings in jobs covered by the New York State UI program. It does not include employment outside New York State or in jobs not covered by the UI system (for example, "off the books" jobs and federal government jobs).

Appendix Figure A.2

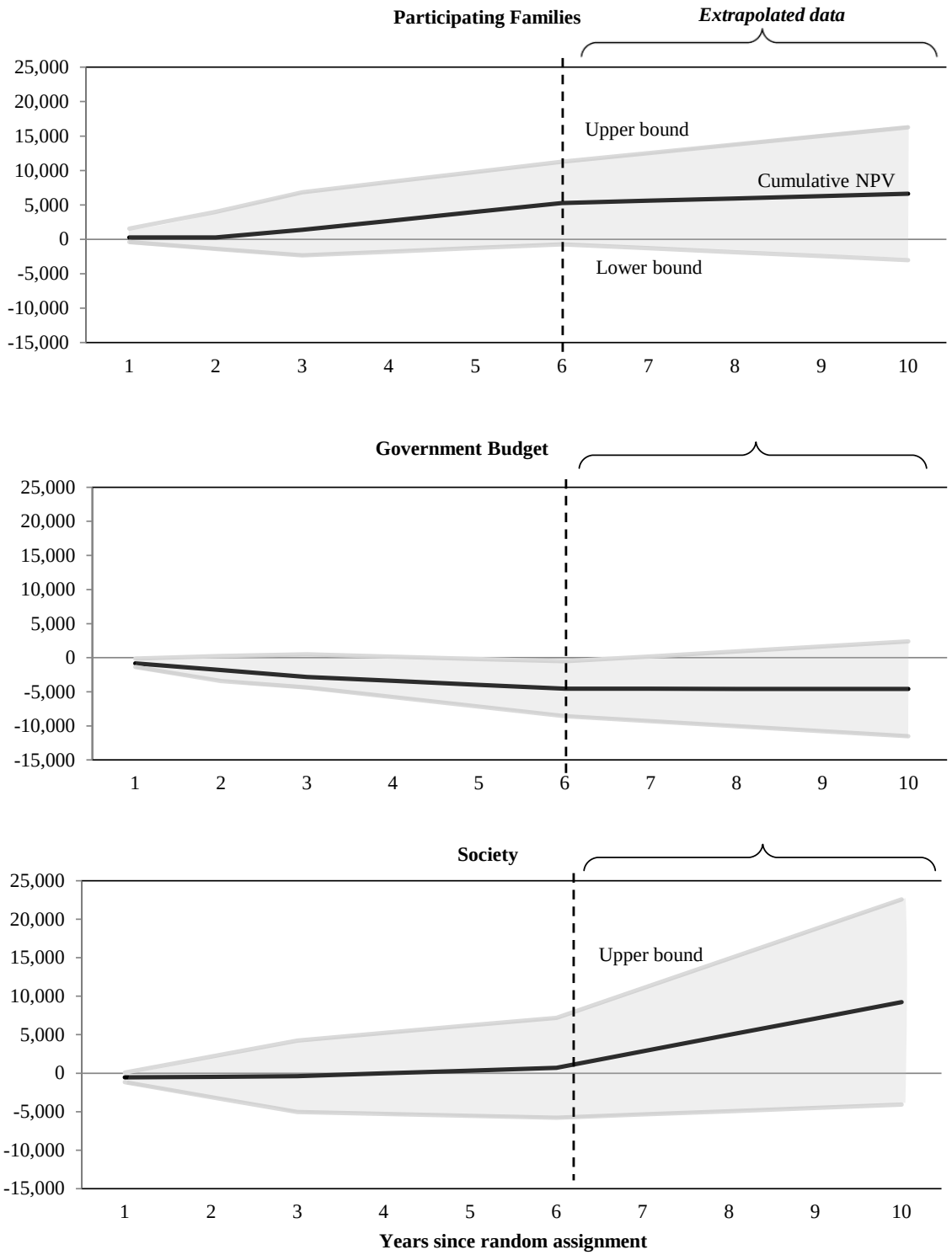
Ten-Year Cumulative Net Present Values (NPVs): Core Sample, FSS-Only



NOTE: The shaded area represents the 90 percent confidence interval.

Appendix Figure A.3

Ten-Year Cumulative Net Present Values: Core Sample, FSS+Incentives



NOTE: The shaded area represents the 90 percent confidence interval.

Appendix B

Methods for Estimating Benefits and Costs of the Family Self-Sufficiency Program

Estimating the Value of Individual-Level Outcomes

As indicated in Chapter 6, the dollar value of each outcome in the Family Self-Sufficiency (FSS) program benefit-cost analysis, as well as the net present value (NPV) of pertinent benefits and costs for each analytical perspective, is estimated for each household in the FSS-only, FSS+incentives, and control groups. Using these household-level estimates, the net value of benefits, costs, and NPVs for the FSS-only and FSS+incentives programs — for the core sample and for the subgroups — is calculated as regression-adjusted program-control outcome differences, or impacts. Except for the dependent variables, the impact estimation models used for this purpose are the same as those used in the impact analysis.

This section of describes how household-level outcomes are valued, while later sections address extrapolation and discounting.[1] Some of the outcomes, such as earnings and incentive (reward) payments, are measured in dollars. These outcomes are simply inflation-adjusted to reflect their value in 2016 using the gross national product (GNP) implicit price deflator. However, the other outcomes need to be monetized, which, in most cases, means that each outcome is multiplied by a unit cost or value. The discussion of the benefit-cost valuation methods begins with the valuing of FSS program outcomes and then turns to earnings-related and public benefits outcomes.

Unit Costs of FSS and Reward Payment Activities

The unit costs of the FSS-only and FSS+incentives programs are expressed as costs per milestone month,[2] the FSS program's total costs divided by the number of milestone months for a set participation period. For example, program operations costs associated with milestone achievements and reward payments were available monthly, so these unit costs were calculated by month. Other operating costs, such as customer service surrounding escrow maintenance or other services provided by the New York City Department of Housing Preservation and Development (HPD) and LaGuardia Community College, were available by program year, so these monthly costs were assumed to be constant over the program year.

Program Operations Costs

Program operations costs include all FSS-related activities performed by the community-based organizations (CBOs) and LaGuardia, which includes holding program orientations,

[1]Two alternative discount rates, 0 percent and 5 percent, are used in the sensitivity testing discussed in the last section of this appendix.

[2]"Milestone months" are months in which an individual achieves one milestone or more — that is, at least one of the 13 program criteria indicating progress in program activities, training, or employment.

meeting with clients to complete a needs assessment and career plan, and providing ongoing case management and workforce development. In the first three years of the FSS study, services from the CBOs were only available to the FSS-only and FSS+incentives groups, and services from LaGuardia were only available to FSS clients who were either in the control group or not in the FSS study sample.[3] In Years 4 and 5, all FSS clients were allowed to get services from both the CBOs and LaGuardia.

Unit costs were estimated separately for the FSS-only, FSS+incentives, and control groups during Years 1 through 3, Years 4 through 5, and Year 6. For example, to calculate the operating costs of the FSS-only program during Years 1 through 3, total CBO costs were divided by the number of milestone months for the FSS-only group over the three years. Milestone months were calculated by averaging the number of months each household in the FSS-only group achieved any milestone across all households, based on the milestones database that Seedco designed. The unit cost was multiplied by the average number of milestone months for FSS-only households during Years 1 through 3 to determine the average cost per household.

CBOs' operating costs were calculated from the milestones database, which covered program records from mid-2008 through December of 2013. Because the CBOs' contracts with HPD were performance-based, CBO staff needed to record each participant's milestone achievement, which triggered payments to the CBOs for working with the FSS families. The milestones database was also used to estimate household participation in FSS.[4]

Expenditures at LaGuardia Community College were based on annual contract amounts for LaGuardia provided by HPD. A per-household cost was estimated by assuming that the full FSS enrollment was 2,000 households over the five-year program period, based on information from HPD, which is similar to the number of enrollees cited in the U.S. Department of Housing and Urban Development (HUD) FSS prospective study.[5] In the first three years of the program, LaGuardia costs were applied only to the control group members who enrolled in FSS, since FSS-only and FSS+incentives households were directed to seek services from the CBOs rather than from LaGuardia. In the final two years, costs were applied to all three groups equally, since all FSS households could access services at LaGuardia. Detailed participation information was not available for services delivered by LaGuardia.

[3]About 20 percent of the FSS study's control group enrolled in FSS during the Work Rewards study follow-up period.

[4]These data could produce an underestimate of participation, because some milestones were capped (and once the cap was reached, it was unclear whether CBOs continued entering in those milestones). Based on a comparison with CBOs' payments in the HPD ledgers, it appears that the understatement is small.

[5]de Silva, Wijewardena, Wood, and Kaul (2011).

Program Management and Administration

Costs of general management and oversight of the FSS program by HPD — which include assisting clients and CBO staff with FSS escrow questions and sending annual escrow account statements to clients — were estimated based on the agency's staff salary costs. Salary costs were marked up by 85 percent to account for overhead and fringe benefit costs.[6] This analysis assumes that the full FSS enrollment including the two program groups was 2,000 families over the five-year period, as described in the previous section.

These HPD costs were allocated across research groups based on estimates of the percentage of staff time spent with the FSS-only and FSS+incentives households, those in the control group who enrolled in FSS during the study follow-up period, and FSS families not participating in the FSS study. In addition, based on information from HPD, MDRC researchers estimated proportions of HPD staff time spent (1) working with voucher holders who did not enroll in FSS (staff helped these families cope with a range of employment, public assistance, and other issues) and (2) working on activities related to HPD institutional transitions (including outsourcing most FSS program functions to the CBOs and LaGuardia) during the study's follow-up period. The analysis isolated the HPD costs associated with FSS escrow, the oversight of CBOs and LaGuardia contracts, and other FSS management activities, which together constitute the costs of FSS program management. The remaining HPD costs, which cover nonstudy activities as well as FSS program development activities (such as program design, instituting program participation milestones, and training CBOs), were excluded from the program management costs.

Additional program management costs are related to CBOs' contract administration by Seedco, a demonstration contractor. This administration encompasses all FSS-related activities performed by Seedco, including overseeing the CBOs (holding management meetings, producing management reports, conducting site visits, and providing technical assistance to CBOs) and reviewing and processing payments to the CBOs. It also includes hiring case managers and job developers to work at the CBOs through Year 3. Administrative costs were calculated using expenditures in Seedco's general ledger. Seedco recorded expenses that were FSS-related to a different fund from the expenses related to the reward payments, so administration costs were calculated separately for the FSS-only and FSS+incentives groups.

The Seedco expenditures used in the unit cost estimates were incurred between September 2008 and August 2009, an early period in the demonstration. This period may include

[6]The fringe benefits rate is based on information from the New York City Office of Management and Budget Financial Plan. Overhead rates were estimated using Agency Expense Budget Summary information from the New York City Comptroller's Office.

some minimal recruitment costs, since 90 percent of recruitment was completed before September 2008. It excludes much of the start-up costs that were incurred in earlier months.

Reward Payments Activities

Administrative costs were incurred by the organizations that were responsible for central operations (Seedco) and local operations (the CBOs). Seedco developed a payment tracking system, created special coupon books that families used to submit any necessary documentation to claim work rewards, verified that requirements for coupon payment rewards were met, maintained up-to-date bank account information to make sure payments were disbursed to the correct accounts, issued earnings statements during each payment period to mail to families, created and maintained a helpline to answer questions about reward payments, made payments to families who earned rewards, marketed the program, performed general program management, and oversaw the CBOs. The CBOs conducted program orientations, refresher sessions, social events, and workshops for participants. The CBOs were also responsible for distributing coupon books and providing general customer service. Administrative costs were calculated using expenditure data from Seedco's general ledger. Participation was defined as the number of rewards earned from Seedco's reward payments tracking system.

Unit Costs of Earnings-Related Outcomes

Other than the earnings themselves, which are measured in dollars, the outcomes in this section include fringe benefits, tax payments, and tax credits.

Household-level earnings were estimated using administrative records from the New York State Department of Labor. For households in which more than one adult is enrolled in the FSS study, earnings are calculated by combining each enrolled adult's earnings records for the household. The sums may be underestimated, since about 15 percent of FSS study enrollees indicated at baseline that the household unit had more than one adult, but the enrollee was the only adult who enrolled in the study and consented to having his or her unemployment insurance (UI) data collected. In addition, since children could not enroll in the study, MDRC was unable to collect earnings data on adults in the household during the study period who were children at the time of random assignment, and household composition may have also changed since random assignment. Since fringe benefits, tax payments, and tax credits are calculated based on these earnings calculations, these outcomes are subject to the same data limitations.

A sensitivity analysis showed no substantial differences in earnings impacts between households with nonenrolled adults and households with enrolled adults, so the benefit-cost findings should be minimally affected.

Additionally, escrow disbursement data are denominated in dollars and estimated from HPD administrative data.

Fringe Benefits

Fringe benefits were evaluated by applying an estimate of average employer spending on fringe benefits to measured earnings of sample members.[7] Fringe benefits are estimated at 21.18 percent of earnings.[8] Required benefits are 2.93 percent of earnings and include unemployment insurance and workers' compensation. Optional benefits are 18.25 percent of earnings and include retirement benefits, health benefits, and group life insurance. (Social Security and Medicare are excluded from fringe benefits because they are included as taxes.) For example, a sample member who earned $30,000 would have estimated fringe benefits of $6,354 (21.18 percent of $30,000).

The benefit-cost analysis assumes all jobs provide fringe benefits at the average employer spending rate. In fact, the proportion of employment compensation provided as fringe benefits varies by wage level, public/private sector, industry, and part-/full-time status.[9]

Taxes

Taxes are estimated by applying 2009 tax rules to earnings. Individual-level tax estimates consist of federal income taxes — including the earned income tax credit (EITC), child tax credit, and additional child tax credit — as well as New York State income taxes, payroll taxes, and state and local sales taxes. Federal and state income taxes are calculated based on marital status at the time of random assignment, and the calculation assumes single filing status for heads of household who were not married and married-filing-jointly status for heads of household who were married. In addition, all children in the core sample households at the time of random assignment are assumed to be eligible children for the federal EITC, child tax credit, and additional child tax credit.

Federal Income Tax. For the 2009 tax year, the federal standard deduction was $5,700 for those filing as single and $11,400 for those filing as married (that is, filing jointly). An exemption of $3,650 was available for the taxpayer and each dependent. This information was used in each household's calculations, along with 2009 tax rates. For example, an unmarried individual with two children who earned $30,000 would have an estimated federal taxable income of $13,350: earnings minus standard deduction minus (household size multiplied by

[7]Fringe benefits as a percentage of spending is based on Employee Benefit Research Institute (2004).

[8]Fringe benefits as a percentage of wages and salaries is based on Employee Benefit Research Institute (2004) and the U.S. Bureau of Labor Statistics (2016).

[9]U.S. Bureau of Labor Statistics (2016).

exemption), or $30,000 – $5,700 – (3 x $3,650). In this example, using the 2009 federal income tax rate scheduled for 2009, the estimated tax was $1,585.

Both the federal EITC and additional child tax credit are refundable credits: The credits can be greater than a household's tax liability, resulting in net payments from the tax agencies. The EITC, a credit for low-income individuals who have worked during a tax year, was estimated using parameters from the Joint Committee on Taxation. The tax credit is structured around three earned income ranges — a phase-in range, where each dollar of earnings is multiplied by a credit rate; a range in which the taxpayer receives the maximum EITC amount; and a phase-out range, where the tax credit is reduced at a phase-out rate for every dollar over a certain amount. The income ranges, credit rate, and phase-in and phase-out rates are based on marital status and the number of qualifying children.

Individual-level estimates of a sample member's EITC amounts are made based on the parameters of the credit in 2009 as well as the annual household earnings and baseline household characteristics of each sample member. For example, a single sample member with two dependent children and earning less than $12,570 in 2009 would be eligible for a credit equal to his or her earnings multiplied by the credit rate, which was 40 percent. Someone earning $7,000 would receive an EITC credit of $2,800. If earnings were between $12,570 and $16,420, the household would receive the maximum EITC amount of $5,028. If earnings were more than $16,420, the credit would be reduced by 21 percent for every dollar over $16,420. For example, someone earning $30,000 in 2009 would receive an EITC credit of $2,168.

The child tax credit is a nonrefundable credit of $1,000 for each qualifying child. Because the credit is nonrefundable, tax filers can only receive a credit that is equal to or less than their tax liability. For example, a sample member with two children who earned $30,000 would have an estimated child tax credit of $1,577.50. Even though two children would equal $2,000 of tax credit, the sample member only had tax liability of $1,577.50, so the credit cannot exceed this amount.

The additional child tax credit is refundable and is a way that taxpayers may be eligible to receive a credit for the full amount of child tax credits (or, in this example, the difference between $2,000 and $1,577.50). For taxpayers with one or two children, the tax credit is the lesser of the difference between the full child tax credit and tax liability or 15 percent of earnings over $3,000. For example, a sample member with two children who earned $30,000 would have an additional child tax credit of $422.50, which is the lesser of the difference between the full child tax credit and tax liability, or 15 percent of earnings over $3,000. Taxpayers with three children or more are allowed to take a credit by the amount that payroll taxes

exceed EITC if that amount is greater than the refund calculation using the 15 percent of income over $3,000.[10]

The Making Work Pay tax credit is a refundable credit of up to $400 for single tax filers and up to $800 for married taxpayers filing jointly. The credit amount is equal to 6.2 percent of earned income up to the maximum amount for those earning $75,000 or less in 2009 and 2010. Single tax filers who earned more than $75,000 had the maximum credit reduced by 2 percent of their earned income over $75,000, and married tax filers who earned more than $150,000 had the maximum credit reduced by 2 percent of their earned income over $150,000. The single tax filer with two children in the example above would have received a credit of $400. Since the tax credit was available only for tax years 2009 and 2010, the credit was applied to the tax calculations for Year 1 and Year 2 of the program.

For all of these credits, the benefit-cost analysis assumes a 100 percent tax credit take-up rate. This assumption, that all sample members receive tax credits if they are eligible for them, is consistent with the assumption that all sample members pay the taxes for which they are liable.

New York State Income Tax. For the 2009 tax year, New York State income taxes had a standard deduction of $7,500 for single tax filers and $15,000 for married couples filing jointly. In addition, the state allowed an exemption of $1,000 for each dependent. For example, using the 2009 New York State income tax rate schedule, a sample member earning $30,000 who has two children would have a taxable income of $20,500 and a state income tax liability of $1,007.

New York State has a nonrefundable household credit based on the taxpayer's adjusted gross income. A single taxpayer who earned $30,000 and has two children is not eligible for the household credit, since only individuals who earned less than $28,000 and married couples who earned less than $32,000 are eligible for the credit. The state of New York also has a nonrefundable earned income credit that is equal to 30 percent of the amount of the federal EITC. Someone earning $30,000 and with two dependent children, then, would receive an additional earned income credit of $651.

Additionally, New York has a refundable child tax credit for single taxpayers earning under $75,000 and married-filing-jointly taxpayers earning $110,000. The tax credit is the greater of 33 percent of the federal child tax credit or $100 per child. A single taxpayer earning $30,000 with two dependent children would receive a state tax credit of $660 (which is 33 percent of $2,000).

[10]The additional child tax credit was calculated using information from Tax Year 2009, Form 8812 (OMB No. 1545-1620).

Sample members who had less than $18,000 in income (which includes earnings, food stamps, and Temporary Assistance for Needy Families [TANF] payments) and pay less than $450 a month for rent are eligible for New York's refundable real property tax credit that pays up to $75, depending on income level. A single taxpayer earning $30,000 with two dependent children is not eligible for this tax credit.[11]

New York City Income Tax. The New York City income tax rate is determined by adjusted gross income minus state exemptions. In 2009, the city allowed an exemption of $1,000 per child in addition to the standard deduction, as calculated above in the state income tax section. Thus, using the 2009 New York City income tax rate schedule, a sample member who earned $30,000 in 2009 and had two children would have a city income tax liability of $649.

New York City also has an earned income credit, which was 5 percent of the federal EITC amount in 2009. The city also has a small household credit of up to $15 for single tax filers making under $12,500 and up to $30 per family member for married tax filers making under $22,500. A sample member making $30,000 who has two children is not eligible for this credit. Finally, New York City has a school tax credit that equals $62.50 for single tax filers and $125 for married tax filers.

Payroll Taxes. Payroll taxes use the 2009 rules for the Social Security and Medicare taxes. For Years 3 and 4, payroll tax calculations take into account the 2 percent payroll tax cut that was effective in 2011 and 2012 but use the 2009 earned income cap. Both employee-paid and employer-paid payroll taxes are calculated. The rate for Social Security's Old-Age, Survivors, and Disability Insurance (OASDI) was 6.2 percent (4.2 percent in 2011 and 2012), and the rate for Medicare's Hospital Insurance was 1.45 percent, for employees and employers each. For Social Security taxes, earnings were taxable up to $87,000; all earnings were taxable for Medicare. These tax rates and the OASDI cap were applied to sample members' measured earnings. For example, a sample member who earned $30,000 in 2009 is estimated to have contributed $2,295 in payroll taxes for the employee portion, and his or her employer is estimated to have contributed $2,295 in payroll taxes for the employer portion 6.2 percent of $30,000 plus 1.45 percent of $30,000. In Years 3 and 4, the estimated contribution is $1,695.

Sales Taxes. Sales taxes are calculated as the sales tax rate multiplied by estimated expenditures. The combined New York State and local sales tax rate between March 1, 2009, and February 28, 2010, was 8.375 percent. It is assumed that 31 percent of income (the sum of earnings, Safety Net Assistance [SNA] payments, and TANF) was spent on general merchandise (and thus would be subject to sales tax). This estimate is based on the 2009 Consumer Expenditure Survey results for respondents who made between $10,000 and $14,999 annually.

[11]New York Form IT-214.

This group of respondents was appropriate because the FSS core sample members averaged between $12,000 and $14,000 in each of the first five years following random assignment. Food stamp (Supplemental Nutrition Assistant Program, or SNAP) payments are not subject to sales tax but were included since part of the income base in the Consumer Expenditure Survey included food stamps as part of income. Thus, the sales tax estimate for a sample member with earnings of $10,000, TANF of $1,000, and SNAP payments of $2,000 would be $338 (31 percent of $13,000 multiplied by 0.08375, or 8.375 percent of $4,030).

Unit Costs of Public Benefits Outcomes

Most of the public benefits outcomes, including TANF/SNA and food stamp (Supplemental Nutrition Assistance Program, or SNAP) payments, are denominated in dollars. The estimates are calculated from administrative records from New York City's Human Resources Administration (HRA) and HPD.

Administrative Costs of Public Assistance

Administrative costs of public assistance were not denominated in dollars. The combined federal, state, and local administrative costs for TANF/SNA and food stamps were estimated as a percentage of the value of the payments to families. Specifically, total administrative costs for the three programs were divided by total payments in fiscal year 2009. Data on the TANF costs and payments were obtained from financial data that states submit to the U.S. Department of Health and Human Services (using data reported on Form ACF-196). Food stamp administrative costs were calculated from the *Fiscal Year 2009 Supplemental Nutrition Assistance Program (SNAP) State Activity Report*, obtained from the U.S. Department of Agriculture, Food and Nutrition Service. The resulting administrative rate was applied to sample members' TANF and SNA payments to estimate the cost of transfer administration. The rates used in this analysis are presented in Table 1.

Extrapolating Outcomes Beyond the Observation Period

This section explains how individual-level outcomes in Years 7 through 10 after random assignment were estimated. For the first category of outcomes discussed in Chapter 6 — participation in FSS and reward payments activities — the observation period covers all but one year of the outcomes. Only Year 7 outcomes were not measured and are estimated to be the same as in Year 6, only for FSS study participants who did not graduate by the end of Year 6. The calculation assumed that any FSS participant who had not graduated within six years and had received a contract extension graduated in Year 7. The unit costs applied to the estimated Year 7 outcomes are the same as those used for Years 4 through 6.

Appendix Table B.1

Administrative Cost for Every Dollar of Benefit, Fiscal Year 2009

Benefit	Cost Per Dollar
TANF[a]	$0.090
Food stamps (SNAP)	$0.187
Housing subsidy	$0.078

SOURCES: MDRC calculations from fiscal year 2009 TANF financial data, fiscal year 2009 Supplemental Nutrition Assistance Program (SNAP) State Activity Report (obtained from U.S. Department of Agriculture, Food and Nutrition Service), and fiscal year 2009 VMS Data/Reports (obtained from U.S. Department of Housing and Urban Development.)

NOTE: TANF is Temporary Assistance for Needy Families. SNAP is Supplemental Nutrition Assistance Program.

[a]A broad definition of "benefit" was used that includes several other items beyond basic assistance, including child care, refundable tax credits, and nonrecurrent short-term benefits.

For the other two categories of outcomes — those related to earnings and public benefits — estimation of program effects beyond Year 6 uses an extrapolation method with three components. The first is the base from which the outcomes were extrapolated. The last four quarters of the observation period are used as the base. For all program group members except those whose FSS participation contracts were extended more than one year, this base period occurred after all engagement with the FSS programs.[12] A post-program period like this is ideal for extrapolation of outcomes beyond the observation years.

The second element is the time horizon — the period over which outcomes are extrapolated. The time horizon for this analysis is 10 years, which is long enough to cover the entire seven-year investment period as well as several more years as society's return on the investment mounts. It is often argued that the appropriate horizon is the expected work life of sample members — much longer than 10 years. However, the life circumstances of families in the Work Rewards demonstration can be expected to change substantially more than 10 years

[12]This statement also applies to most of the control group. However, some controls enrolled in FSS later in the observation period, which potentially extended their contracts into Year 6 and past Year 7.

beyond random assignment, particularly when children become old enough to leave their homes. Furthermore, each additional year of the time horizon introduces added uncertainty to the estimates.

The third component is the way in which base-period outcomes are assumed to change during Years 7 through 10. Here the program effects in the base period are extrapolated by replicating the quarterly measured earnings of the FSS-only, FSS+incentives, and control groups during the last year of the observation period. This projection approach assumes implicitly that the earnings of the three groups increase at the rate of inflation and follow the same seasonal pattern as in Year 6. The approach is also consistent with the stable measured earnings trends for the three groups over the course of the six-year observation period, as shown in Figure 4.1 in Chapter 4. Furthermore, an eight-year follow-up of a Section 8 (now Housing Choice Voucher) population, in an impact analysis based on a voucher lottery in Chicago, shows a similarly stable earnings trend for voucher holders (of whom some participated in FSS and others did not).[13]

Several alternative specifications were tried. In one, the base period was changed to all six years and ordinary least squares regression was used to fit a line to outcomes over the entire period. This trend line was extended across Years 7 through 10, providing a linear forecast based on the entire follow-up period. In another, the base period was kept as Year 6, and ordinary least squares produced a trend line based on the four base-period quarters. Again, the trend line was extended across Years 7 through 10. In two other specifications, the Year 6 base-period results were assumed to decay (third specification) or grow (fourth specification) by 20 percent annually in Years 7 through 10.

Discounting the Values of Outcomes

Finally, the discount rate is used in the benefit-cost analysis. A discount rate is used to convert benefits and costs that occur at different times into present values. In this analysis, the present value of benefits and costs means their value in 2016 dollars, and a real discount rate of 3.5 percent is used to convert their values when measured to their value in 2016. This rate is intended to account for forgone investment (the use of a real rate also accounts for inflation). Thus, the nominal values of measured and extrapolated benefits and costs through 2015 have been increased to reflect both inflation (measured by the GNP price deflator) and the 3.5 percent annual discount rate. Extrapolated benefits and costs in 2017 and beyond have been reduced by the discount rate.

[13]The study by Jacob and Ludwig (2012) followed earnings and public assistance outcomes in Chicago for a large sample of Section 8 voucher recipients and Section 8 applicants who did not receive vouchers.

There is no “correct” discount rate, so the rate used in this analysis is subject to uncertainty. In order to test the sensitivity of the NPV results to this rate, the analysis has computed NPV using two alternative discount rates — 0 percent and 5 percent. A 5 percent return constitutes an 8 percent nominal return on top of 3 percent annual inflation, which is consistent with the return on U.S. stocks in the last 50 years. A zero real return is below the long-term U.S. government bonds in that period. Using these alternatives does not change the findings appreciably.

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